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Editorial

Jenna Coriddi

In the past decade, the concept of education for sustainable development (ESD) has grown remarkably, bolstered by strong international support. The most significant and well-known recent international initiative being the United Nations proclamation of the years 2005-2014 as the Decade of Education for Sustainable Development (DESD). The Decade is the culmination of many initiatives that have developed on the international stage since 1980, when the term ‘sustainable development’ was first introduced by the International Union for the Conservation of Nature. Seven years later, the Brundtland Report (Report of the World Commission on Environment and Development) stated that the aim of sustainable development is to ‘meet the needs of the present without compromising the ability of future generations to meet their own needs’. In 1992, Agenda 21 identified education as the most important tool that could be used to achieve sustainable development. However, ten years later the progress made by its initiatives was deemed insufficient, and the concept of education for sustainable development was created to reshape how we think about education in a global context.

But as development educators, how is this new concept of interest? ESD has traditionally been perceived as having a strong environmental focus, while development education (DE) primarily addresses issues related to social inequality and poverty. Issue 6 of *Policy and Practice* examines the relationship between DE and ESD and considers why it is important that development educators should deepen their engagement with the sustainable development agenda.

Although ESD developed significantly from environmental movements and continues to have a strong environmental association, it has evolved to incorporate the explicit interaction between society and the environment. ESD encourages collaboration among all adjectival sectors that seek to educate on sustainability issues including the protection of the environment, economic development, human rights and social development. Vision building, partnerships and networks are among the strategies being employed in the DESD to incorporate contributions from as many relevant sectors and interested parties as possible, including the DE sector.

Given the breadth and relevance of ESD to several related educational disciplines, it is important to fully understand what it is and, most importantly,

what it can provide us as development educators. The methodologies and content matter of DE and ESD are closely aligned including the concept of education as a tool of empowerment, inspiring individuals and society to assume sustainable lifestyles for the benefit of present and future generations. DE and ESD provide skills, values, knowledge and understanding that support positive action toward sustainable management of the environment and greater social equity and poverty eradication.

However, there is also a tension between DE and ESD based upon a perceived environmental bias in the latter and, perhaps, a concern that a stronger alliance with ESD may diminish or dilute the primary social agenda of development education. These tensions need to be addressed and resolved for the benefit of both disciplines to ensure strong collaboration on issues of common concern. Climate change is an obvious issue that has drawn together DE, EE and ESD practitioners in new coalitions toward raising awareness and advocating national and international policies to address this most pressing of global issues. Increasing numbers of development organisations are adopting climate change as a campaigning issue and refocusing their educational work to partner with colleagues in the environment sector. These new alliances may point the way forward for greater co-operation under the auspices of ESD.

The four Focus articles in this issue address different aspects of the relationship between DE and ESD. Deirdre Hogan and Roland Tormey identify the tensions and uncertainty that exist between the sectors and acknowledge the growth of ESD from environmental beginnings. They outline the commonalities between DE and ESD and the possibilities for development education arising from greater collaboration with ESD practitioners. They conclude by urging the reconciliation of sectoral tensions in order to benefit mutually from the expertise and experience that each can provide.

Peter Hopkinson, Peter Hughes and Geoff Layer introduce a useful case study examining the implementation of a whole-institutional approach to ESD. This Ecoversity initiative, a pilot programme launched at the University of Bradford in November 2007, aimed to commit the university to sustainable practices throughout the campus influenced by national and international sustainable development processes. The article outlines in detail the top-down approach to ESD used in the project and the methodology they employed in measuring its outcomes. It is an interesting and informative look at how such expansive educational projects can be successfully implemented.

Ros Wade introduces education for sustainability (EfS) into the debate, preferring the term EfS to ESD with the former offering a more

open approach to alternative viewpoints beyond the rubric of the Western-dominated development discourses. Using her experience as director of the EfS programme at London South Bank University, she discusses how EfS aims to overcome the separation of development education and environmental education that is frequent in the global North. Wade believes that EfS can provide a framework based on the idea of interdisciplinarity to bring together related sectors that have similar aims and objectives, and acknowledges that we will all have to work hard to maintain pace with growing awareness of environmental and development issues.

Elaine Nevin uses her expertise as director of ECO-UNESCO to explain, in depth, how education can support sustainable development practice. She provides a number of examples of good practice in Ireland in the formal, non-formal and informal sectors identified through a research project carried out by ECO-UNESCO on behalf of Comhar SDC. She examines the similarities and differences between ESD, DE and environmental education (EE) and explains the extensive role that ECO-UNESCO has played in the implementation of the DESD in Ireland.

The Perspectives articles present different approaches to ESD theory and practice. Stephen Sterling suggests that a veritable shift in thought and character is required to support sustainable living and that education needs to play a radical role in nurturing this process. Lucy Hargreaves tackles the problem of how to transform a successful pilot programme into systemic and lasting change in schools and universities. Danny Hunter and Peter Taylor examine how Higher Learning Institutions can participate in the Learning and Teaching for Transformation Initiative. Cathal O’Keeffe discusses Link Community Development’s Global Teachers and Linking Schools Programmes which both aim to bridge the gap of knowledge and understanding between schools in the global North and South. David Thomas discusses his participation on the Cut the Carbon march and outlines some of the obstacles to teaching about climate change based on his experience with Christian Aid which was one of the first development agencies to adopt climate change as a campaigning focus. The introduction of ESD and development issues through less traditional vehicles of drama and creative writing is discussed by Pete Mullineaux who relates the importance of human emotion and engagement in understanding the importance of progressive societal change.

This issue aims to encourage debate within the development education sector, and between DE and ESD colleagues, on how closely aligned areas of educational practice can move toward greater collaboration based on mutual support. Despite the distinctions that can sometimes be drawn between DE and ESD, it is important that these sectors learn from each other

for the benefit of their target groups and the wider social and environmental issues that preoccupy these educational disciplines. Reflection and discourse on our current policies and practice, and how they relate to other sectors, is absolutely necessary to continue moving forward.

Readers of *Policy and Practice* are encouraged to contribute to the debate on ESD initiated by this issue. If you have comments on any of the articles published in Issue 6 then please write to the editor: jenna@certreforglobaleducation.com.

Focus

A PERSPECTIVE ON THE RELATIONSHIP BETWEEN DEVELOPMENT EDUCATION AND EDUCATION FOR SUSTAINABLE DEVELOPMENT

Deirdre Hogan & Roland Tormey examine in depth the relationship between development education and education for sustainable development, and aim to provide clarity as to why tensions and uncertainty exist between the two. They address the necessity of both groups of practitioners reconciling their differences to work together and address the pressing issues of today.

Introduction

As the concept of education for sustainable development (ESD) gains momentum and exposure during the United Nations Decade of Education for Sustainable Development (2005-2014, DESD), its relationship with and similarities to development education (DE) are increasingly considered. Is ESD the same as DE? Is DE a subset of ESD? Are DE and ESD competing or complementary approaches to education? What is their relationship with environmental education (EE)?

DE and EE emerged from different traditions and contexts but their aims and objectives occasionally overlapped; the ESD concept drew significantly from the prior work of both. All three forms of education have much in common. They all seek to develop knowledge, skills and attitudes that will enable the learner to critically engage with issues of injustice, inequality and unsustainability and to take positive action for change. They share a vision of education that moves away from conventional didactic teaching methods and towards more active, participatory and interdisciplinary approaches, and they promote learning that results in positive action for social and personal change.

In spite of the similarities, the nature of the relationship between DE

and ESD in particular remains unclear and at times is a source of confusion and apprehension for advocates and practitioners in the field. This article aims to provide clarity on the relationship between the two concepts. It begins by examining development education and environmental education, and exploring the contributions of each to the emergence of ESD. It identifies some of the tensions and uncertainty that exist between DE and ESD, while emphasising the strong relationships between their contents, methodologies and ideologies. The article concludes by urging that the tensions be addressed through open dialogue and collaboration while realising the immense potential of combining efforts in order to meaningfully address the complex and interrelated issues addressed by both fields. The need for education for positive change is too critical to be lost in a battle of words.

The contested ownership of ESD

When the UN declared that 2005–2014 would be the Decade of Education for Sustainable Development, responsibility for developing a strategy for the Decade in the European region was assigned to the United Nations Economic Commission for Europe (UNECE). The UNECE drew together representatives from governments, academia and NGOs from North America, Europe, Russia, Turkey, Israel and the Central Asian former Soviet Republics to accomplish this task. When this group came together for their second meeting in Rome in July 2004 it was immediately evident that the sub-committee responsible for drafting the text and its subsequent revisions had done an excellent job, as most areas of contention had been resolved. It appeared that there would be few difficulties in putting the final draft of the strategy to bed.

However, one problem area remained. The paragraph that briefly sketched the history of the education for sustainable development (ESD) concept made reference to the place of environmental education (EE) as one of the building blocks of ESD, but made no reference to development education (DE). It seemed a small matter when a number of delegates suggested that this omission be corrected. Yet it became the major bone of contention in the Rome discussions.

It quickly became apparent that, while some of those from Northern and Western countries were familiar with DE and tended to view sustainable development as the child of two conceptual parents (development and environmental sustainability), many of those from Mediterranean countries or from the East had little familiarity with development education and tended to view sustainable development as an outgrowth from the environmentalist movement. Some felt that recognising other forms of adjectival education

alongside environmental education was, somehow, conceding the political capital accrued by the environmentalist movement to ‘some group of developmentalists’ who had not toiled long and hard alongside them. What seemed at first like a minor amendment became an ideological battle for the soul and political capital of the ESD concept.

In the end a compromise was found and the final text made reference to both environmental education and ‘development and other targeted forms of education’. The shortened form of environmental education (EE) was capitalised to give it the status of a proper noun, while development education was clearly de-emphasised. Paragraph 13 of the strategy, adopted at a UNECE meeting of ministers in Vilnius on March 18, 2005 states ‘It [ESD] broadens the concept of environmental education (EE), which has increasingly addressed a wide range of development subjects. ESD also encompasses various elements of development and other targeted forms of education’ (UNECE, 2005). Yet, the conflict becomes more important than the compromise when two separate groups feel ownership of the concept of ESD to the point where they are in contention. In a different context, O’Sullivan (2005) acknowledges that when different educational positions become subsumed under a common title there can be a process of pastiche-making, a process of cutting, pasting and splicing which glosses over different positions and creates the semblance of unanimity. However, he believes it is better to explore the diverse positions as such, because it is precisely the interplay between positions that generates critical thinking about them (2005:320).

Despite development education and environmental education operating mostly within their own distinct sectors, they did not develop entirely without influences from the other. There were a few who have addressed environmental issues in their DE work as well as some who have addressed development issues in their EE work. Yet it was more often the case that DE work was delivered with little reference to environmental sustainability, and that EE practitioners often neglected global development and inequalities. As the concept of sustainable development evolved, however, it became clear that these types of concepts cannot be easily separated. Therefore, we need to move from a situation where DE and EE are seen as separate but occasionally overlapping to a situation where they are seen as integrally intertwined. This is the conceptual shift that we seek to explore here.

Development education and environmental issues

The concept of development education (DE) emerged in the 1970s from the work of international aid agencies and development non-governmental organisations (NGOs) who recognised the need to educate the developed

world about issues of poverty and injustice in the Third World (Regan, 2006:108). The Joint UN Information Committee (JUNIC) working group on DE, led by the United Nations Children's Fund (UNICEF), created international partnerships with NGOs and built links with public interest groups and development action networks. National committees on development education also began to emerge in several countries. UNICEF established a clearinghouse through which national committees, NGOs and field officers were kept informed of new ideas, publications and productions that would support the integration of DE into formal, non-formal and informal education (UNICEF, 1986).

Ireland was receptive to the DE message. There already existed a strong connection to developing countries through Irish missionary organisations and the Catholic Church strongly supported their initiatives. Trócaire was established in 1973 by Irish Catholic bishops with a dual mandate to support development projects overseas and to inform the Irish public about the root causes of global poverty and injustice. It was a forerunner to DE in Ireland, and from the early stages committed to spending 20% of its income on education of development issues (Kirby, 1994:68). In the mid-1970s the Development Education Commission (DEC) was set up within the Confederation of Non-Governmental Organisations for Overseas Development (CONGOOD) to promote DE within the non-formal education sector. The DEC engaged in information sharing, political lobbying on development issues, public education campaigns and the joint production of development literature (Dóchas, 2005:12). The case for DE in Ireland was strengthened further in 1978 when the Department of Foreign Affairs introduced a DE grants scheme.

While DE traditionally focused on poverty and related issues, a number of authors and practitioners recognised the importance of the environmental link to human security. In an Irish context, for example, the *75:25 Ireland in an Unequal World* resource produced by CONGOOD in 1984 identified the environment as a key development education theme. In the UK, the Development Compass Rose, which originated in the work of the Birmingham Development Education Centre (DEC) gave environmental concerns a central role. The development studies literature, from which DE drew some of its inspiration and content material, also included a growing focus on environmental issues. The United Nations Development Programme (UNDP), for example, placed a growing emphasis on the relationship between the environment and development, as was evident in a number of Human Development Reports (UNDP, 1992; 1998; 2003; 2006; 2007) that explicitly addressed the environment as a key theme. In 2000, the United Nations included environmental sustainability as one of the

eight Millennium Development Goals and, in 2006, the White Paper on Irish Aid referred to the importance of environmental protection in supporting livelihoods of people in the developing world (Irish Aid, 2006b:63).

Environmental education and development issues

The emergence of the term environmental education (EE) can be traced back to the 1972 United Nations Conference on the Human Environment held in Stockholm, Sweden. The conference recommended the establishment of the International Environmental Education Programme (IEEP) to raise awareness of environmental problems and to build EE capacity across member states (United Nations Environment Programme, 1972). The *Belgrade Charter*, produced in 1975 at the International Workshop on Environmental Education in Belgrade, Yugoslavia, provided a *Global Framework for Environmental Education*, stating that EE programmes should be interdisciplinary, involve active participation, have a global perspective, and consider both current and future situations. It went on to suggest that ‘environmental education should consider the environment in its totality - (including) natural and man-made, ecological, political, economic, technological, social, legislative, cultural and aesthetic aspects’ (UNEP, 1975). In subsequent years principles, guidelines and actions for the implementation of EE were developed through the Intergovernmental Conference on Environmental Education, held in Tbilisi in 1977, and the International Congress in Moscow in 1987.

While environmental education (EE) focused primarily on issues such as acid rain, pollution and depletion of natural resources, it broadened its remit to address development issues. International conferences identified the root causes of many environmental problems in social, economic and cultural terms (UNESCO, 1987:5). Speakers from developing countries at Stockholm in 1972 emphasised that the task of resolving environmental instability was second to providing more immediate needs such as food, shelter and healthcare:

“...for two-thirds of the world’s population the human environment was dominated by poverty, malnutrition, illiteracy and misery...until the gap between the poor and the rich countries was substantially narrowed, little if any progress could be made in improving the human environment” (UNEP, 1972).

The relationship between the environment and poverty was further noted in the final report of the Intergovernmental Conference on Environmental Education in Tbilisi in 1977:

“...environmental problems are not just those of the detrimental or irrational use of natural resources and pollution. They include problems of underdevelopment, such as inadequate housing and shelter, bad sanitary conditions, malnutrition, defective management and production practices and, more generally all problems which stem from poverty” (UNESCO, 1977:11).

Integrating development and environmental issues through ESD

A major conceptual breakthrough came with the work of the World Commission on Environment and Development, otherwise known as the Brundtland Commission, which was established by the UN to re-examine global environmental and development problems and to suggest practical and realistic proposals to address them. The resulting Brundtland Report promoted the concept of sustainable development, defining it as ‘development that meets the needs of the present without compromising the ability of future generations to meet their own needs’ (Brundtland, 1987). It identified three components to sustainable development: economic growth, environmental protection and social equity, and suggested that all three could be achieved by gradually changing the ways in which we develop and use technologies (Environmental Literacy Council, 2006).

The work of the Brundtland Commission was followed up at the Rio Summit in 1992, which produced Agenda 21, a blueprint for sustainable development into the 21st century. Chapter 36, *Promoting Education, Public Awareness, and Training*, focused on the role of ESD in providing access to quality basic education for all, building public awareness of sustainable development issues, reorienting existing education to incorporate sustainable development concerns and ensuring that training programmes for all job sectors reflect sustainable development practice. Ten years later the World Summit on Sustainable Development in Johannesburg recommended that the United Nations General Assembly adopt a Decade of Education for Sustainable Development, from 2005–2014, with UNESCO as the lead agency.

The apparent tensions between DE and ESD

The concept of education for sustainable development essentially combines development and environmental educations by adding social and economic perspectives to environmental education and environmental concerns to development education. Perhaps more importantly it brings environment

and development educators closer together under a new, all-inclusive school of thought. However, despite occasional overlapping between EE and DE in the past and the necessary merging of the two fields of operation that ESD provides, tensions remain between DE and ESD.

Advocates of ESD suggest that environment and development organisations share common concerns with regard to the sustainability of the planet and its people and should therefore make strong partners. But, as the discussions on the UNECE Strategy (and the text adopted in the strategy itself) make clear, there are those within the ESD movement who see it primarily as an outgrowth, and a refocusing, of EE. One consequence of this is that some who call themselves practitioners of ESD still focus largely on environmental themes of climate change, pollution and resource use.

This apparent centrality of EE concerns to some ESD practice has meant that ESD has been met with caution by some development educators, who have argued that 'ESD is not a partnership of equals, with the more public-friendly environment message eclipsing or minimising the importance of human development' (McCloskey, 2003:192). It is widely recognised that ESD is more than simply the sum of DE and EE (Bourn, 2003:12; Fien, 2003:4; Martin, 2003:11) and so there may be a concern that focusing all eyes on ESD can detract from their respective agendas for change. There may be a feeling among DE practitioners that they don't want to lose their title of development education practitioners and that too many years and too much effort were invested in creating a profile for DE to sign their work over to ESD. The uncertainty is strengthened when considering how the different adjectival educations have often been isolated from each other in the past, pursuing separate agendas and seldom forming strategic alliances (Regan & Sinclair, 1999:29).

These divisions are given greater meaning as each draws from a different constituency, coordinated by a different group, relating to a different government department and seeking funding from different sources. In Ireland, environmental education is led by agencies like An Taisce and ECO-UNESCO and supported by organisations such as Comhar and Ecological Environmental Non-Government Organisations Network (EENGO); development education is led by agencies like Trócaire and Amnesty International and coordinated by Dóchas; and education for sustainable development is currently coordinated by a National Steering Committee on ESD comprising representatives from a variety of departments and agencies. At governmental level, EE is housed in the Department of Environment and Local Government, DE is located in the Department of Foreign Affairs, and the National Strategy on ESD is the preserve of the Department of Education and Science.

While it would be a mistake to overstate the separateness of these contexts (for example Irish Aid has long funded environmental education projects which had a development component), they do at the same time constitute different milieus within which EE and DE have historically conceptualised themselves, within different sets of relationships and different ‘powerbases’.

Grounds for collaboration between DE and ESD

Given the apparent centrality of EE concerns to ESD, and given the parallel and marginally overlapping past agendas of EE and DE, it is not surprising that development educators might be slow to engage with the ESD agenda. Notwithstanding this fact, however, the conceptual linkages between DE and ESD are striking. These similarities can be readily seen in a comparison of nationally and internationally accepted definitions of and strategies for DE and ESD. We will now explore a number of these linkages using the Irish Aid definition of DE, and UNECE and UNESCO documents on ESD, as our reference points.

Both DE and ESD refer to the complexity of development issues. Irish Aid describes DE as a process of ‘increasing awareness and understanding of the rapidly changing, interdependent and unequal world in which we live’ (Irish Aid, 2006a:9). UNESCO describes ESD as a process of helping people to ‘better understand the world in which they live and address the complexity and interconnectedness of problems such as poverty, wasteful consumption, environmental degradation, urban decay, population growth, health, conflict and the violation of human rights that threaten our future’ (UNESCO, 2003).

The primary emphasis of DE is global poverty and related issues of underdevelopment, human rights, food and water security, health, trade, peace, education and gender. DE promotes an awareness of the causes of poverty and underdevelopment, an understanding of rights and responsibilities, and an appreciation of opportunities to effect change for a more just and equal world (Irish Aid, 2006b:107). Similarly UNESCO, addressing the goals of ESD, recognises that ‘poverty eradication is the greatest global challenge facing the world today and an indispensable requirement for sustainable development’ (UNESCO, 2002:3). ESD explores the same issues that DE seeks to bring to the fore, including poverty alleviation, citizenship, peace ethics, responsibility in local and global contexts, democracy and governance, justice, security, human rights, health, gender equity, cultural diversity, rural and urban development, economy, production and consumption patterns and corporate responsibility (UNECE, 2005:4). Martin writes that the new goal

of sustainable development means that at last DE and EE practitioners have ‘the same hymn sheet and the divergence of the early years [have] started to coincide’ (Martin, 2003:11).

While DE recognises the importance of the environment for human security, its practices tend to focus on the social and economic issues that relate to development. ESD on the other hand places the environment on an equal standing with social and economic factors. UNESCO defines ESD as ‘a process of learning how to make decisions that consider the long-term future of the economy, ecology and equity of all communities’ (UNESCO, 2003:4). As well as the issues listed above, ESD also focuses on areas such as environmental protection, natural resource management and biological and landscape diversity (UNECE, 2005:4). The importance of environmental concerns in addressing human development needs has been increasingly recognised within development literature, and a UNDP Human Development Report has recently noted that ‘climate change is a massive threat to human development and in some places it is already undermining the international community’s efforts to reduce extreme poverty’ (2007: v). As such, ESD provides the broadened focus for DE that is becoming increasingly necessary.

Active and participatory learning approaches of DE and ESD

As with other education sectors, DE and ESD are both located on the periphery of formal education curricula, and seek to integrate a global perspective into existing disciplines and programmes. Both advocate the use of a holistic and interdisciplinary approach. UNECE states that ESD should use a range of participatory, process- and solution-oriented educational methods tailored to the learner (UNECE, 2005:7). Similarly, Freirean liberation theory, which underpins DE, promotes problem-based learning, dialogue and participation within a co-operative learning environment where the teacher engages in learning with the student (Freire, 1970).

The complexity of development issues necessitates that learners have an opportunity to develop skills such as information processing, critical thinking, systemic thinking and personal reflection. These skills support engagement with the depth of information available, as well as the contradicting arguments and the absence of one simple solution. UNECE (in its strategy for ESD) describes this methodology as using ‘systemic, critical and creative thinking and reflection in both local and global contexts’ (UNECE, 2005:4). Irish Aid describes it as ‘seeking to engage people in analysis, reflection and action for local and global citizenship and participation’ (Irish Aid, 2006a:9).

Change begins with the learner. This may mean reflection on personal behaviour and practices and acting accordingly. Actions consistent with sustainable development include reducing energy consumption in the home, minimising one's ecological footprint, recognising and promoting cultural diversity, critiquing Ireland's Overseas Development Aid programme, taking action in developing countries through NGOs or volunteering organisations, becoming ethically aware consumers and taking an interest in media representation of local and global issues.

The conceptual relationship between ESD and DE clearly addresses the need for development and environmental issues to be addressed in an integrated way, and it is essential that we find ways of moving beyond the tensions which have characterised relations between practitioners of DE and ESD. Increased interaction between departments of education, foreign affairs and environment (as well as between the activists and movements they interact with) will be necessary for the development of an Irish National Strategy for ESD, particularly given the traditional separation of environmental and development education discourses. Such a process of bringing together people from different traditions, with different priorities but the same basic goal, is not always easy, but it is essential if we are to build a strong basis for addressing joint concerns. It is in the best interest of both DE and ESD that development educators do not leave the field of play to those who prioritise environmental concerns, but instead actively engage in the process of forging a unifying and comprehensive ESD.

Conclusion

The concepts of development education and environmental education emerged in the 1970s to focus on issues associated with underdevelopment and environmental degradation respectively. As time progressed it became apparent that these individual agendas were interrelated; global poverty could not be considered in isolation of the environment and vice versa. The Brundtland Report reconciled the interests of both under the umbrella of sustainable development, and Agenda 21 put forward the concept of education for sustainable development. However, tension remains between DE and ESD, partly due to disparities in tradition, relationships, and how and where each is organised. Notwithstanding these differences, DE and ESD are very similar in terms of content, methodology, ideology and commitment to action for positive change. In light of this it is essential that practitioners of DE and ESD work together to share educational expertise, to combine forces and to strategically plan for a future that places DE and ESD at the centre of formal, non-formal and informal education.

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Roland Tormey is Assistant Dean for Research in the Faculty of Education and Health Sciences in the University of Limerick. He has worked and published in development education and ESD for more than a decade. He is a former Chair of 80:20, Educating and Acting for a Better World, and has represented Ireland on the UNECE Steering Committee and Task Force on the Decade of Education for Sustainable Development.

EDUCATION FOR SUSTAINABLE DEVELOPMENT: USING THE UNESCO FRAMEWORK TO EMBED ESD IN A STUDENT LEARNING AND LIVING EXPERIENCE

Peter Hopkinson, Peter Hughes & Geoff Layer describe the implementation of, successes of, and lessons learnt from the Ecovercity initiative, a pilot programme at the University of Bradford that aims to integrate education for sustainable development into both the formal curriculum in all areas of study and the informal curriculum of life on campus.

Introduction

In November 2005 the University of Bradford launched the Ecovercity initiative which committed it to developing a practical demonstration of ‘sustainable development’ across the entire institution covering the built campus, curriculum, community engagement and the organisational culture. The Ecovercity project has the vision of ‘creating a culture of learning and living within a model of sustainable development’. The practical realisation of this vision is both challenging and complex. In this paper we describe, synthesise and critically reflect on the processes of:

1. Shaping academic policy and curriculum review around the United Nations Educational, Scientific and Cultural Organisation’s (UNESCO) education for sustainable development framework;
2. Engaging academic staff and students around education for sustainable development during the first 18 month start-up phase of the Ecovercity programme.

Our approach seeks to use the UNESCO framework as a way of creating space for discussion and building links between disconnected areas of academic policy and discourse. At Bradford, as in many higher education institutions (HEIs), we have academic curriculum initiatives and targets focused on education for sustainable development (ESD), diversity, internationalism, and widening student experience through participation and faith. These distinct areas have their own individual agendas but it is clear

that they are also interconnected. Our starting proposition is that ESD offers scope to join up some of these distinct areas without diluting their individual discourses. This paper describes the early stages of development in this process including some initial reflections and conclusions.

ESD and higher education

The connections between higher education (HE) and sustainable development (SD) are varied and include campus environmental management (Shriberg, 2002), curriculum developments (Muijen, 2004), community engagement (UNEP, 2006) and the development of global citizenship (Parker, Wade & Atkinson, 2004). Until recently these different strands of HE and SD remained largely separate with distinct academic and practitioner clans. Recent national HE conferences on ESD (Bradford), sustainability practice (Kingston) and global citizenship (Bournemouth) have demonstrated that there is a growing cross-referencing between the different areas and number of clear and recognisable points of connection. The challenge at an institutional level is bringing these different strands together in ways that are meaningful and valued by the different partners.

Ecoversity

Ecoversity is a strategic initiative launched by the university in November 2005 as a response to a number of factors including the physical condition and appearance of the estate and student dissatisfaction with some of the facilities and services. The university was influenced by the Higher Education Funding Council for England's (HEFCE) *Sustainable Development in Higher Education: consultation on a support strategy and action plan* (HEFCE, 2005), which raised questions such as 'what might sustainable development mean for a university like Bradford?' and 'could sustainability provide a means of linking a number of issues and challenges facing the university in a way that would foster new, positive and creative action?'

The Ecoversity vision was articulated under four overarching objectives:

1. Working towards sustainable education: shaping a more sustainable future by engaging students and propagating the skills and knowledge needed in the pursuit of sustainable development;
2. Working towards a healthy environment: protecting the environment by minimising our resource use and emissions whilst also enhancing the surrounding environment;

3. Working towards a thriving economy: creating affordable accommodation and an attractive environment to improve our recruitment and retention of students and staff to bring greater prosperity to the university, city and region;
4. Working towards social well-being: creating a greener, safer environment in which our students, staff and the local community can live, study and be active.

The first year of Ecoversity was strongly characterised by a period of estates planning and a programme of new building and refurbishment, which tended to reinforce the idea that Ecoversity was indeed largely about the estate, physical environments and local issues. In this period and, subsequently, the ESD objective moved to the fore allowing the debate about sustainability to open up and broaden both the Ecoversity vision and actions to encompass the learning and living experience of students across the institution and within the international and development aspects of sustainable development. This debate was driven by the Pro-Vice Chancellor for Learning and Teaching and the Director of Education for Sustainable Development, and supported by a cross-institutional ESD project group.

Embedding ESD in the Bradford student learning and living experience

It would be disingenuous to claim that the early development of ESD under Ecoversity at Bradford was guided by a grand master plan or followed a linear, sequential process in which the vision was followed by a strategy leading to funding and subsequent action. Reflection on the period since January 2006 makes it clear that we moved in all these areas simultaneously or in parallel and, as we worked out the vision and strategy, we explored a number of funding streams for ESD projects. Internal support was strongly influenced by the ability to draw on evidence and experience from an internally funded ESD curriculum review project. In 2006, we also commissioned and drew upon several HEA subject-centred ESD grants in history, classics and archaeology, biosciences and geography, and environmental and earth sciences subject. We used our in-house expertise and activities to make real progress on the ground while also developing student engagement with ESD outside of the curriculum through a range of student activities that built on existing student support structures. Our multi-strand approach therefore included top-down policy developments, locally-led bottom-up initiatives and pilots and side-on engagement with external groups and bodies.

a) Formal academic policy

In January 2006, an ESD task group was established to debate and develop an approach to ESD that drew on group members' experiences and recognition of the contextual factors described above. A key outcome from this process resolved that Bradford's approach to education for sustainable development would be informed by three important considerations:

1. The varied definitions of sustainable development and education for sustainable development are the source of considerable academic debate. Acknowledging and accepting the contested nature of these terms may be a means of accommodating different approaches (including critical perspectives) between and within academic subject communities;
2. The terms sustainable education, sustainable development in the curriculum and education for sustainable development do not necessarily mean the same thing. Over the past few years, ESD has become the preferred term of the Higher Education Academy in defining the links between SD and the curriculum. On this basis it appeared to be an appropriate term to use in relation to the University of Bradford;
3. Previous attempts to 'green the curriculum' at a national level have had limited and short-lived success outside of the mainstream disciplines of environmental sciences, geography and built environment. There are many reasons for this which have been widely debated (Sterling & Scott, 2007) and it is important that lessons from these prior experiences are learnt. In particular we have noted that:
 - The development of a rigid core curriculum risks being seen as irrelevant to students' main discipline of study, hence;
 - It is wise to build on linkages to SD from within existing disciplines and programmes whilst maintaining relationships to a wider set of values about what SD means;
 - The theory about sustainable practice is more effectively learnt if an organisation can be seen to practice what it preaches, for example, through participative policy making.

These considerations were taken up as guiding principles at the formal start of the Ecoversity ESD project in August 2006. This project was mandated to:

- Develop a formal, institutional academic policy for ESD;
- Develop and implement an approach to ESD curriculum

- development for all curriculum and all students;
- Create a programme of activity for widespread student engagement around ESD and Ecoversity.

During 2006, discussions were held to identify what type of framework or definition of ESD would have the greatest meaning and offer the broadest scope for developing academic and student interest and enthusiasm. It was felt that many definitions such as Brundtland were too narrow and overused, requiring a new framework which nurtures critical perspectives and supports decentred, locally meaningful and subject-specific development. The framework should also include core values, a strong global and international dimension and incorporation of the notion of sustainability as a living experience.

After considerable debate, Ecoversity drew upon the UNESCO definition which regards ESD as ‘a process of learning about how to make decisions about the long-term future of the economy, ecology and equity of all communities and about capacity building for future-oriented thinking’. The wider UNESCO framework (REF) also seemed to offer some particular advantages and shared similar values to the Ecoversity ESD objectives, namely:

1. ESD should help students learn how to make decisions about the future. Bradford’s position should be that we want our students (and staff) not just to know about sustainable development (SD), but to be able to practice it, influence it and shape it, both now and in their future lives. ESD therefore requires us to think about how our students develop knowledge, skills and values, and the *process* of education itself;
2. The UNESCO view of SD stresses the importance of the lived experience in terms of learning about and practicing SD. In this sense, the approach is consistent with Bradford’s objective of using the transformation of the estate to help students and staff engage with the meaning of SD and the difference that this approach can make to the running of all organisations;
3. The definition is also explicit in stressing that SD is not just about environmental or resource issues, but more broadly about social and economic wellbeing, community involvement and international understanding and responsibility. In this respect, the UNESCO statements are likely to provide a more comfortable ideological home for many academic areas of the institution such as the Department of Peace Studies, Bradford Centre for International Development, Centre for Community Engagement and the School of Health;

4. The university has a distinctive student profile. Nearly half of our first year and foundation students are from minority ethnic groups, and nearly half come from low income groups. Nearly 45% of our students live at home, the vast majority in the parental home. 22% of our students are from outside of the UK, drawn from more than 100 countries, mostly in the global South. Finding ways to link students' diversity of background and experience to developments around curriculum and the student learning experience offers a creative opportunity for the institution and Ecoversity.

Academic debate about the UNESCO framework was developed through a further round of meetings which produced a largely positive response. Many academics had taken Ecoversity and ESD to be a rather narrow environmental and ecological perspective and were surprised and academically interested in the breadth of the framework which allowed them to find clear points of connection in relation to their teaching and learning within their own diverse disciplines (see Table 1 for more detail). The UNESCO framework was subsequently adopted as academic policy and as a core principle of the Institutional Teaching, Learning and Assessment Strategy in February 2007.

b) Curriculum review and development

In parallel with the development of the academic policy paper, a pilot curriculum review project was internally funded to identify and refine options for how education for sustainable development could be defined, and curriculum models through which it could be delivered, within the context of the Ecoversity project.

A methodology based on interviews and document reviews of four individual degree programmes (pharmacy, midwifery, civil engineering and business administration) was developed toward an initial assessment of SD and ESD content and reference against the UNESCO definition of ESD. In addition the websites of the main external professional or accrediting bodies for each programme were examined for reference to sustainable development or education for sustainable development. These findings were then discussed with staff and students from each programme who were then asked to assess themselves. A report was produced highlighting the extent and nature of SD and ESD coverage, and the opportunities for development.

Interestingly many of those interviewed during this process *initially* associated SD with environment. However, by using the UNESCO definition both staff and students were able to articulate linkages between

environmental, social and economic dimensions of ESD, including international and development issues. Table 1 provides an illustration of the topics and themes identified within the four programmes.

This pilot project demonstrated that all four programmes have clear linkages to ESD and international development issues but are often not made explicit or clearly recognised. However the UNESCO framework and review process creates an opportunity for creative conversation around ESD that might not otherwise be possible. Moreover, students and staff appear to highly value the broader social, economic and global context of their discipline which sometimes becomes submerged by other pressures and commitments.

Table 1- Linkages between individual degree programmes and ESD

<i>Subject</i>	<i>No. of modules with explicit reference to SD/ESD</i>	<i>Examples of social, economic and global contexts included within modules</i>
<i>Pharmacy</i> (200 students entering in 2006)	0	Affordability of drugs in third world; Treatment practices of and for different ethnic communities and cultures; Alternative treatments e.g. homeopathy and herbal medicine; Socially responsible science.
<i>Midwifery</i> (30 students entering in 2006)	0	Ethics of child birth and care; Cultural diversity, poverty; Community access to health care, etc; Natural versus technological child birth; Breast feeding versus bottle and disposable nappies.

<p><i>Civil engineering</i> (100 students entering in 2006)</p>	<p>11</p>	<p>Environmental systems; Green design; Corporate strategy and engineering; Renewable energy; Transportation systems; Environmental law and policy.</p>
<p><i>Business administration</i> (250 students entering in 2006)</p>	<p>7</p>	<p>International business development; Business ethics; Corporate social responsibility; Macro environment for business; International tourism; Strategic management; Business and society; Sustainable operations management.</p>

c) Student experience: informal curriculum

The student experience at most universities typically has a limited and fragmented connection to the values, ideals and practical aspects of living, studying or working in a sustainable way. This is reflected in the limited attention to sustainability in campus buildings and infrastructure, in curricula outside of very specific disciplines and in the culture and management of an institution. For many higher education students, sustainability may at best be reflected in access to recycling bins, a few cycle stands and – outside of mainstream geography or environmental subjects – an elective module on sustainable development or related aspects of development or global citizenship. In many cases their experiences are of an institution which appears to be actively working against some of the key ideas of sustainability (over-heated rooms, unnecessary waste and poor non-car transport provision) and lacks explicit cross- or inter-cultural learning opportunities. In extreme cases, student groups are segregated on the basis of ethnicity, culture or faith.

Central to ESD and the informal curriculum at Bradford are three ideas:

1. Effective and deep learning about sustainability cannot be confined to an individual programme or degree but has to take place across the entire student experience;
2. The campus, wider community and institutional culture are crucial elements in supporting and exemplifying sustainability in practice as a living experience. In this sense, the campus and the institutional culture are key educational tools and learning environments;
3. The student population is itself a learning resource which provides a direct and immediate range of learning opportunities and experiences around ethnicity, faith, living experience and global culture. At Bradford a large part of our ESD activity seeks to focus on the social characteristics of a diverse student body and the implications that this has for ESD.

It follows from this that as much effort needs to be placed on the informal curriculum as the formal curriculum and that each needs to form a seamless, integrated whole.

The informal curriculum model at Bradford is under development through a number of project activities including a student ambassador project, volunteering programmes, student internships and a green living programme. As examples of the informal curriculum we will focus on the ambassador and volunteering projects.

The Ecoversity ambassador project is a direct transfer of similar schemes operating at a number of United States universities over several years. This peer-to-peer education model employs a number of students (recruited on a competitive basis) on a weekly basis as sustainability or environmental leaders for the student body. These students then typically work with natural cohorts of peers (often dorm or halls of residence based) to promote and drive campaigns, competitions, events and actions in support of sustainability. This approach aims to bring SD to life within student living and socialising environments. The ambassador team's recruitment process aims to reflect the diversity of the student body, and reach a wide range of students. Under the guidance of a full time faculty member, who is appointed to develop facilitation and leadership skills, and address issues such as resourcing, and health and safety, the students are encouraged to decide for themselves how to integrate SD into their academic experiences. The model is essentially a practical education process in which students learn by doing. The programme assists their autonomy by allowing them to

work without assessment or the pressure of attaining credits or qualifications. Rather students are granted the autonomy to select, direct and manage their own projects within a broad framework of ESD.

The first pilot phase of the project, delivered between February and May 2007, generated a number of student-led projects, including an institution-wide consultation around student accommodation to identify the needs and wants of diverse student groups (for example in respect to their year groups, nationality and ethnicity) which were fed into plans for a new student village.

This first phase of the project was moderately successful, despite being constrained by a number of factors which have since been reviewed and used to re-design the full project phase which started in October 2007. A significant outcome of the pilot was how it revealed very different perceptions formed about the university and the varied experiences and needs that such a diverse set of students have on campus. It also showed the extent to which students were already tapped into debates and action around global development and ESD, which was a strong motivating factor in their applying to become an ambassador. The ambassador project therefore forms one important initiative for building, linking and expanding an ESD/global development student network on campus.

Student societies, clubs and events are central to the experience of many students whilst at university and they are motivated by a range of factors in undertaking voluntary activities. Some societies, clubs, events and voluntary opportunities have an explicit or implicit ESD or global development focus or potential. These activities offer a natural meeting point for students from diverse backgrounds and strongly influence the 'student experience'. Another student volunteering project, UCAN, currently provides structured volunteering opportunities for around 1,000 students, mostly in local community activities supporting community groups, projects and schools.

We are currently working with UCAN to develop more explicit volunteering activities around ESD in support of both Ecoversity and SD in the local community which itself is strongly multi-cultural and characterised by large areas of poverty and deprivation. Through such activity our aim is to bring together a diverse student group to develop cross-cultural collaboration in the context of a multi-cultural community itself characterised by diversity and immersed in strong links to the global south through ties to countries such as Pakistan and Bangladesh. We aim therefore to connect an internal university student group focused on ESD and global development with broader ESD and international development initiatives on campus and in the local community. The Tree House Café, which is run largely by student

volunteers (since 1984), is already a wonderful working example of how such a grouping can come together locally. It is an educational resource for global issues, peace and non-violence initiatives and a base for community support and activity, while offering up Fairtrade and vegetarian food. This initiative long pre-dates Ecoversity but is an excellent testament to student initiative and cross-cultural education.

Discussion and conclusions

The development and emergence of the University of Bradford's ESD initiatives are the outcome of a happy synergy between institutional responses to a sector-wide strategic interest in SD and existing local expertise in stimulating student learning in SD. This illustrates how a top-down initiative stimulated by a national and international sustainable development process can ultimately create the political opportunity and imperative for a major organisation like a university to commit to sustainable development.

At a grassroots level, lecturers and students have been engaged with learning about sustainable development since (and before) the term existed, albeit focused within 'core' subjects like development studies, environmental science and geography. At Bradford there has been a strong tradition of development education (e.g. Bradford Centre for International Development) and environmental education (e.g. Department of Geography and Environmental Science) with little crossover between the sectors.

For the Ecoversity ESD project, the university adopted the UNESCO framework for ESD as a guide for academic development. This overarching framework has proven, in the early stages of curriculum development, to be extremely helpful in identifying and validating an ESD-relevant and recognisable context for a wide range of current academic teaching and learning. It has also facilitated open and interesting conversations about future opportunities for curriculum development. The framework is especially useful in ensuring that ESD is not seen as an environmental initiative. It ensures that debates and conversations are opened up around the local and the global, theory and action, and the process of education itself, whilst offering ample reference to scientific, technical, ethical and managerial concepts to draw in the diverse body of academic disciplines within any university.

ESD should not only 'value the richness brought to learning by the diversity of cultures, backgrounds, opinions and ideas' (Forum for the Future, 2004:56), but also be *guided by* the diversity of the learners and teachers engaged in the process. A diverse student body presents a challenge to ESD, but also an opportunity for students to learn from each other about different

world views, value systems and priorities for sustainable development.

The context in which the Ecoversity initiative at Bradford operates means that debates around issues such as poverty, equality, health, religion and environmental quality are often directly relevant and meaningful to the daily lives of students both on campus and in the immediate communities where they live. Thus both the formal and informal curricula are integrated into the immediate reality of students' everyday living in ways that are not forced or irrelevant.

For this reason the Higher Education Academy ESD programme, which is based on the UNESCO framework and involves academic staff working within their subjects and disciplines, has proved to be a more effective methodology for staff and students alike rather than either an isolated 'top-down' approach or externally imposed alternatives. Top-down frameworks are useful, however, in providing overall coherence to localised developments and demonstrating top level leadership and support for the process of development. The sector is littered with many examples of bottom-up approaches to curriculum development and environmental action which after a period of initial success are not sustained through either dependence on key personnel who move on or because they fail to gain the groundswell of support needed for large-scale policy change.

The ESD programme at Bradford has been running for less than a year and the challenge to deliver on the ESD objective is considerable. A timetable for the roll-out of the curriculum review and ESD action plans at school level has been developed. Academic secondments are currently being recruited to lead academic school developments over the next three years and a new post to expand, lead and co-ordinate the informal curriculum has been filled. In terms of assessment, the impact of the curriculum work on students and staff in terms of process, learning and outcomes will be evaluated through a longitudinal research project led by a dedicated senior educational researcher and action researcher.

The Ecoversity aim of embedding ESD in the student learning and living experience will require the institution and the ESD project to develop an agreed roadmap for the development and delivery goals and to create the capacity to learn and adapt from experience through time. Any ambitious programme for change faces challenges and unexpected barriers. However, we have been able to navigate some of the early barriers and build confidence and support for the ESD project at an institutional level. This has been achieved by running and evaluating pilots, communicating their outcomes, developing business plans, identifying funding, leveraging internal and external support, opening conversations around processes and underlying values, and seeking to keep internal academics and students informed and

engaged in the process. As we move into the next critical 12 month phase of delivery, we will attempt to expand and consolidate the early achievements and the lessons learnt.

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EDUCATION FOR SUSTAINABILITY: CHALLENGES AND OPPORTUNITIES

Ros Wade outlines the emergence of education for sustainability (EfS) as a concept and reflects on its potential to generate an international movement for change. The article considers key questions for education practitioners and theorists and offer possible signposts for the future. It reflects experience gained through directing the EfS international Masters' programme at London South Bank University, as associate director of LSBU's Education Research Centre, and as a researcher and writer on EfS. It offers a personal perspective, although at the same time, it is also greatly enriched by the ideas and work of students, alumni, colleagues and fellow EfS commentators.

Introduction

Since the Earth Summit in 1992, there has been a growing awareness of the need to address issues of sustainability and the terrain subsequently seems to have become more favourable towards education for sustainability (EfS). Governments were very slow to take the initiative on EfS after the first Earth Summit with this role largely taken up by non-governmental organisations (NGOs) and committed activists. Their work tended to have two strands: the first comprising support, in the form of training and awareness raising for educational practitioners, and the second concerning advocacy and lobbying for policy change. The EfS programme at London South Bank University (LSBU) was itself a result of this engagement when, in 1993, a consortium of environmental and development NGOs came together to design a course which would support practitioners and activists across the UK. One of its key aims was to support participants in becoming effective agents for change through education.

Since 1992, NGOs have, of course, been actively seeking to strategically influence the national political landscape with regard to EfS and have established alliances in order to navigate the difficult terrain of government policy and practice. In the UK, for example, the Development Education Association (DEA) and Council for Environmental Education (CEE) have had some success in influencing the government, for example

through the Commission for Sustainable Development. More specific approaches have also had results, such as Oxfam, the Royal Society for the Protection of Birds (RSPB) and World Wildlife Fund (WWF) in Wales working toward the incorporation of EfS into statutory educational requirements. However, NGOs and activists have not been the only drivers for change in EfS. The dynamics of change are far more complex than that and, indeed, many NGOs and activists are highly critical of the current understanding of sustainability encapsulated in the more mainstream concept of education for sustainable development (ESD).

Notwithstanding differences over terminology and understandings therein, the policy and practice framework for EfS has developed considerably and in many countries there is now government policy in place in all areas of the formal education sector, from schools to higher education. In addition, national legal requirements on sustainable development in relation to other sectors, such as the built environment, have created space and demand for training at a range of levels. At the international level, education was further endorsed at the second World Summit on Sustainable Development (WSSD) which took place in Johannesburg in 2002 and also attempted to make links between EfS and Education for All (EFA: basic education as a requirement for the achievement of the Millennium Development Goals on poverty reduction). Since UNESCO has been given the task of taking the lead internationally in both EfS and EFA, it made very good sense to bring them together. These efforts have been further supported by the Japanese government's successful lobbying for education for sustainable development to be given the status of a UN Decade from 2005 to 2014. Education is therefore now viewed as a prime lever for social change, described by UNESCO in the implementation plan for the Decade in the following way: 'It means education that enables people to foresee, face up to and solve the problems that threaten life on our planet' (UNESCO, 2005).

Although the terrain seems more promising now for EfS, there are concerns from many EfS commentators, such as David Orr and Stephen Sterling, that progress is too slow and does not go far enough. In fact, Sterling feels that no less than a complete shift in the overall paradigm of education (and by implication society) will result in sustainability. For Sterling, education itself is often part of the problem: 'Far from being an agent of change, education often underpins individualism, unsustainable lifestyles and patterns of consumption, directly or by default' (Sterling, 2005:10).

A common language?

The EfS journey has taken us into uncharted territories with new ideas and

concepts, which, in turn, meant the need for a new vocabulary and may eventually require a new language. New ideas are always contested and so debates about terminology have been a key feature of this field from the outset. Sometimes these ideas can seem obscurantist rather than enlightening but they can engender reflection and discussion from very different perspectives and points of view. The term ‘education for sustainability’ (EfS) was specifically chosen by our LSBU programme team rather than the more mainstream ‘education for sustainable development’ (ESD), both to critique the very Western-dominated discourse on development and to reflect an openness to alternative perspectives and radical viewpoints encompassed in education for sustainability. EfS also readily facilitates an interpretation of sustainability within a range of scales from the personal and psychological to the organisational, local, national and global. In addition, it shows a willingness to explore the methods and purpose of education and to undertake value commitments openly – education *for* sustainability – that can bring about sustainable change.

Other terms like ‘sustainability education’ or ‘sustainable education’ (Sterling, 2006) are also part of the discourse and need to be acknowledged. Sterling believes that ‘sustainability’ indicates the need for a change of educational paradigm as a whole, rather than a modification of the existing paradigm, hence the notion of ‘sustainable education, where the emphasis is on the nature of educational thinking, policy and practice as a whole’.

Some educators regard the term ‘sustainable development’ as the process towards an end point of ‘sustainability’ just as ‘sustainable education’ could also perhaps be seen as an end point, with ESD as the process towards it. Within this scenario, EfS could be regarded as possessing both the *process towards* and the *vision of* sustainability. The proliferation of terms and interpretations related to sustainability arguably reflects a strength and richness in education that we should value. It would be disingenuous to say that terminology is not important but, at the same time, it is essential not to become too caught up in such discussions to the detriment of the development of EfS itself. While bearing these issues in mind, I will use the term EfS in the course of this article.

Pathways to EfS

Although many educators feel that the ground is now more fertile for EfS, some consider its development to have been rather patchy. According to Lescek Iwaskow, Ofsted Inspector with responsibility for ESD in England and Wales, ‘[I]f you were to look down on England from above you would probably see a relative desert for ESD. If you homed in there would be some

oases of some excellent practice' (Environmental Audit Committee, 2005: 30). Like most complex ideas, the concept of EfS is contested by an array of constituencies, each with its own strong views. This is not really surprising when we consider its history.

Agenda 21 called for environmental education (EE) and development education (DE) to be cross-cutting themes in all education policies and practice (United Nations, 1992:221) with the implication that from this synergy the concept of education for sustainability would somehow emerge. Agenda 21 was the result of a lengthy negotiation involving more than 178 different countries and related power blocks. It was, in its own way, a remarkable achievement as it provided a basis for educators and policy makers to start to develop a more coherent understanding and practice of EfS.

Chapter 36 of Agenda 21 attempted to bring the two existing constituencies of EE and DE into a relationship by brokering the new inclusive concept of EfS. These constituencies undoubtedly have their roots in Western countries which perhaps makes the process less relevant (or not relevant at all) to other parts of the globe. In many Southern and emerging countries, EE and DE issues are very obviously interconnected and not regarded as separate constituencies. In South Africa, for example, Lotz-Sisitka points out that, 'environmental education is strongly focused on the social, political, economic and biophysical dimensions' (Lotz-Sisitka, 2004:67). She sees, therefore, no perceived dichotomy between social justice and environmental protection. However, this viewpoint is not necessarily always translated into practice. For example, in a review of progress towards Agenda 21 in Kenya, Dorcas Otieno suggests that 'the environment has been looked at in great detail from the biophysical view but with less emphasis on economic and social perspectives' (Otieno, 2005).

The separation of DE and EE in the global North illustrates the Western perspective that divides the human and the natural world which many feel is one of the major obstacles to EfS. Therefore, those of us who have been brought up in a Western educational/academic setting may have more to unlearn than those who have not! However, we have to recognise that the dominant paradigm operating in the world today is a Western one and this colours policy at both national and international levels. Moreover, this construction of EfS has been quite strong and has provided both opportunities and constraints.

Nonetheless, over the last decade it has become clear that EfS required a radical re-think of both EE and DE rather than their simple addition and integration. This was never going to be straightforward as there are too many potential contradictions and conflicts of interest. The starting points for Western conceptions of EE and DE can be summarised as below:

Figure 1

Environmental Education	Development Education
<ul style="list-style-type: none"> -Conservation of the natural world is the priority; -People can sometimes be the problem; -Development issues and poverty eradication are secondary to this. 	<ul style="list-style-type: none"> -People come first; -Poverty reduction, social justice and development is the main priority; -Environmental and conservation issues are secondary to this.

It was perhaps rather naïve to believe that two movements, coming from very different starting points could just somehow start to collaborate and work together without difficulty. The starting point for DE was the human and for EE was the natural world, and both concepts operated with contrasting priorities. In addition, in the West there was no history of the development and environmental constituencies working together but rather a degree of mistrust between them. But EfS is surely much more than the sum of DE and EE, and perhaps one of the key constraints to progress is the fact that many people are more concerned with environmental or development issues rather than embracing sustainability as a broad concept encompassing the need to support both nature and humanity. EfS may therefore need to free itself from its EE and DE origins in order to embrace more fully other elements which contribute to EfS, such as sustainable design, alternative energy, earth education, human rights education, conflict resolution, futures education, anti-racist and inter-cultural education. We need to move towards a clearer, more conceptualised and integrated form of EfS which builds on a range of perspectives and can, in turn, become a catalyst for study across a range of fields and disciplines.

To this end, some have preferred not to take the route of enquiring into the potential of EE and DE for EfS, but have rather enquired into what kind of education might mirror, explore and debate the relationship between environment and society. Some NGOs, such as Oxfam, developed the concept of ‘global citizenship’ (Oxfam, 1997) in order to integrate the dimensions of EfS from the standpoint of individual rights and responsibilities (Wade, 2001). This is an ethical standpoint based on both local and global mutuality in relation to basic rights, social justice and environmental justice. Some consider this concept too anthropocentric and that it underplays our human dependence on the biosphere and the earth’s finite resources. However, since

EfS requires and makes central the *agency* of human beings, this concept can be very helpful in constructing an ethical framework for action (Dower, 2003).

A focus on the nature of education and of sustainability may help us to move beyond the constraints illustrated above. For example, what kind of education is required if we wish to live sustainably? Certainly, current educational practices have been found wanting. According to David Orr:

“Education is no guarantee of decency, prudence or wisdom. Much of the same kind of education will only compound our problems. This is not an argument for ignorance but rather a statement that the worth of education must now be measured against the standards of decency and human survival – the issues now looming so large before us in the twenty first century. It is not education but education of a certain kind that will save us” (Orr, 2004:8).

Some commentators go so far as to say that education itself is a negative idea which merely divides us by creating ‘two classes of people everywhere: the educated and the uneducated or undereducated’ (Esteva, et al, 2005:20). They feel that education is often a new means of colonisation of the mind and that it denigrates local and indigenous knowledge and skills. To them, even Paulo Freire’s concept of education for transformation implies a certain level of arrogance and hence oppression. They prefer the idea of ‘learning’ which implies a more active and ‘autonomous capacity for building creative relationships with others and with nature, relationships that generate knowing and wisdom’ (ibid:28). Others, however, like Maiteny argue that it is not education that is the problem but the *methods* of education that are used. Maiteny maintains that indigenous people also have educational systems but perhaps ‘not that we would recognise as the methods are so different’ (comments on a draft).

Education as presently constructed can be broadly divided into three orientations: the vocational/neo-classical, the liberal progressive and the socially critical. Practitioners of EfS tend to position themselves mainly within ‘socially critical’ education (Fien, 1993:20) where ‘the teacher is a co-ordinator with emancipatory aims; involves students in negotiation about common tasks and projects; emphasises commonality of concerns; and works through conflicts of interest in terms of social justice and ecological sustainability’. However, this orientation tends to portray knowledge as mainly socially constructed and its critics suggest that it fails to give enough weight to the learning needed to live within the set biophysical boundaries of our world. In addressing some of the issues relating to the politics of

knowledge, Janse Van Rensburg identifies one key challenge for educators:

“...to find and use theoretical frameworks which enable the acknowledgement of wider ways of knowing – in ways which open up greater possibilities in the re-conceptualisation of socially and ecologically appropriate development processes” (Van Rensburg, 1999:18).

Van Rensburg sees EfS in South Africa as very much a process which both recognises the importance of indigenous knowledge, while also recognising that it is not unproblematic (ibid:16). Although EfS is still a contested term, there is considerable consensus that the EfS process offers a ‘holistic approach through recognising the complex, interconnected nature of all aspects of the world around us from an individual to a global level’ (Sterling, 2005:23). This is also called a systems or relational approach and it emphasises contexts and connections in order to build up whole pictures of phenomena rather than breaking things into individual parts. It is a way of seeing which focuses on processes, patterns and dynamics and, as such, can open up possibilities to look at EfS from outside of the constructs of EE and DE. For example, the EfS programme at LSBU has used the diagram below to explain and explore the relationships between EfS and wider social and ecological systems.

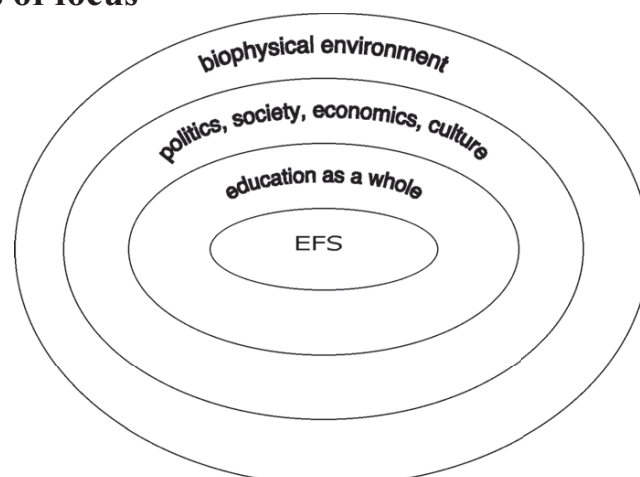
Focus 1 - At the centre is education for sustainability

Focus 2 - The context of Focus 1 is education as a whole

Focus 3 - The context of Focus 2 is the social, economic and cultural environment

Focus 4 - The overall context is the biophysical environment as evidenced in the view of the Earth from space (Sterling, 2000).

Figure 2 Levels of focus



EfS provides the opportunity (and necessity) to bring together different disciplines. An EfS framework can offer a vehicle for different disciplines to contribute to an understanding of sustainability and, in doing so, translates EfS into terms which they own and understand whilst also drawing on other disciplines as necessary. EfS is about engendering this process of inter-disciplinary learning and is also the interface between theory and practice which underpins the development of education for sustainability as a meaningful and challenging field. UNESCO, using the term ‘education for sustainable development’, summarises it as follows:

“ESD is facilitated through participatory and reflective approaches and is characterised by the following:

- 1) is based on the principles of intergenerational equity, social justice, fair distribution of resources and community participation, which underlie sustainable development;
- 2) promotes a shift in mental models which inform our environmental, social and economic decisions;
- 3) is locally relevant and culturally appropriate;
- 4) is based on local needs, perceptions and conditions, but acknowledges that fulfilling local needs often has international effects and consequences;
- 5) engages formal, non-formal and informal education;
- 6) accommodates the evolving nature of the concept of sustainability;
- 7) promotes lifelong learning;
- 8) addresses content, taking into account context, global issues and local priorities;
- 9) builds civil capacity for community-based decision-making, social tolerance, environmental stewardship, adaptable workforce and quality of life;
- 10) is cross disciplinary. No one discipline can claim ESD as its own, but all disciplines can contribute to ESD;
- 11) uses a variety of pedagogical techniques that promote participatory learning and critical reflective skills” (UNESCO, 2007).

For the last decade the international EfS learning community at LSBU has been actively contributing to a growing understanding of EfS and, interestingly, many in this learning community do not come from EE or DE backgrounds, but from other disciplines such as peace education, trades union education, health education and business education. The UN Decade of ESD will provide an opportunity for different elements of EfS to come

together in a more joined-up approach to influence educational and social change. This is an immense challenge for educators but it is essential for EfS that we step out of our comfort zones and re-think the fundamental questions in new ways:

- What kind of society do we want or need in order to achieve sustainability?
- What kind of economic and political system could allow this?
- What kind of education system do we need to achieve this?

Drawing from over 15 years of experience working in EfS, I will outline some key elements which may help to answer these questions by providing opportunities for new ways of thinking towards a new paradigm of education.

Developing EfS: essential elements

A) Cross-sectoral and inter-disciplinary approaches

The EfS programme at LSBU was founded on the principle of cross-sectoral and inter-disciplinary collaboration that involves bringing together a team working in different disciplines and sectors, including higher education, schools, community education, NGOs and business. While EfS forums and networks operating at a local level are particularly supportive of cross-sectoral learning, NGOs can be a catalyst for this approach as they often work across sectors. At government and policy level, sectors (as well as departments) are often very isolated from each other so local examples of successful EfS initiatives can often provide a catalyst for central government policy.

With regard to inter-disciplinarity, commentators such as Sayer and Maiteny argue that it is particularly important for social scientists and their natural science counterparts to enter into dialogue. ‘Science or the production of any kind of knowledge is a social practice. For better or worse (not just worse) the conditions and social relations of the production of knowledge influence its content’ (Sayer, 1992:6). Maiteny emphasises the importance of *methods* in relation to EfS and goes on to stress that the understanding of such relationships and phenomena ‘can be enhanced by using an essentially scientific method – i.e. by devising hypotheses and then testing them out through observation and experience’ (Maiteny, 2002:25).

For EfS to be most effective, structures need to be reconfigured to allow cross-sectoral and joined-up thinking. This is one of the greatest

challenges for EfS, as structures in formal education especially often fail to support inter-disciplinarity and sometimes actively work against it. This is not to denigrate specialist knowledge, rather to recognise that the challenge of sustainability requires new thinking and synergy across current subject specialties.

B) Sharing diverse perspectives

In a world dominated by neo-liberal perspectives, it is important for alternative voices and perspectives to be heard, especially those which challenge the current hegemony. This is not to be negative about all Western perspectives (or even all neo-liberal ones) but we do need to be wary about allowing the dominant discourse which has led us to our current unsustainable lifestyles to drown out other voices. At the same time, we should not forget that some of the strongest critiques of current neo-liberal and neo-conservative policies come, in fact, from Western thought and commentators. However, learning our way out of unsustainability requires open-mindedness in approaching new (and sometimes old) ways of thinking, for example, from local and indigenous knowledge and diverse philosophical perspectives.

C) Broadening the concept of education

EfS, as currently aligned, tends to focus too much on the formal statutory education sector and on training and curriculum development. The formal education sector will always be under the strong influence and control of government and, while EfS practitioners have made significant inroads into these agendas, they are arguably still dominated by the perceived demands of the economy and current dominant neo-liberal perspectives. Education outside the formal sector, such as youth and community education, NGO education, business education, and civil service education, may offer more opportunities for the study and development of EfS. While more and more time today is spent in formal education, it is clearly becoming increasingly important for EfS practitioners to be able to influence agendas in non-formal as well as formal education. If we accept that EfS is a lifelong process, then there are many entry points at which we can begin to engage with sustainability issues. We are also influenced by an ever-widening range of communication channels that can stimulate our interest in EfS beyond formal education and professional development.

D) Linking the personal and professional

Many of us lead lives which are divided into very separate realms: we think we hold certain values but do not always put them into practice, not always consciously or deliberately, but sometimes out of habit, inertia or inhibiting structures. Kumar and Selby argue that the psychological or spiritual dimensions of change are just as important or perhaps more important than the political dimension because our core values form the basis for our actions. ‘The real impetus for ecological sustainability and social justice stems from ethical, aesthetic and spiritual visions’ (Kumar, 2005). He adds that ‘the problem is not matter but materialism...The moment we encapsulate an idea or a thought into an ‘ism’ we lay the foundations of dualistic thought. The universe is uni-verse, one song, one poem, one verse’ (Kumar, 2005).

Kumar and others regard our Western dualistic contradictions between mind and body as being responsible for many of our present problems of unsustainability. For example, at a very basic level we may know in our heads that our behaviour is contributing to the increase in greenhouse gases but unless we really believe and feel at an *affective* level that it is important to address this problem, we will not act to change. At a recent workshop that I ran for MA Education students in Chichester, they were asked to identify three events or experiences which influenced their personal journeys towards an interest in EFS. Some students felt that this had been a very gradual process and cited their upbringing and backgrounds, others mentioned books or films, and some could even trace their development to a particular critical moment when their whole awareness changed. Sustainable living demands nothing less than a complete change in our relationship with others and the world, a change in our way of being, something we might call an ontological epiphany (Wade, 2006).

This is not easy when the structures we live in encourage us to live unsustainably. We therefore need to be convinced at the deepest level if we are to try to change, otherwise any change that does occur tends to be first order or superficial rather than substantive. When values become shared at an affective level, the possibilities for social change increase exponentially. As Maiteny suggests:

“Shared belief and meaning is a sort of cultural glue that makes sense of experience and relationships. It is vital to the process of social cohesion and sustainability and personal responsibility for one’s role within the social context” (Maiteny, 2002:352).

E) Understanding the complex processes of change

Understanding some of the dynamics of change is essential for EfS practitioners who aspire to be agents of change. The development of motivational and leadership skills in oral, visual and written communication (such as report writing, strategic thinking and planning) needs to be part of a broad portfolio. The most effective change is never top-down or bottom-up but a mixture of the two and, in effecting positive change, we can also learn from business and management analyses where organisations have to adapt constantly to changing conditions or go under. ‘Organisations are not just organisms, evolving and adapting as environments change. They are made up of people: thinking, conscious, able to make choices about what they do’ (Binney & Williams, 1997:158).

‘Leadership’ is not a word that educationalists are always comfortable with because of some negative associations with didacticism and directorial management. However, leadership is something that we need to embrace if EfS is to be effective; a form of leadership which supports and promotes values of sustainability, involves a strong commitment to participation and collaboration but does not hide behind these commitments when it is appropriate to take a lead.

In a discussion at a recent EfS conference, there was a strong feeling that EfS practitioners too often shy away from acting as leaders or spokespersons and surrender the field of leadership to a small (often self-appointed) but well-connected group of individuals who have the confidence to put themselves forward. Sometimes this can be advantageous if they can articulate and inspire interest in EfS, but this needs to be backed up with commitments to participation and democratic involvement.

F) A lifelong learning process

We need to work from the premise that EfS is an affirmative, lifelong learning process, where much of our learning will take place outside the formal sector. If we invite formal, statutory education processes to embed learning for sustainability we could wait indefinitely to develop a society with the capacity to live sustainably. Moreover, the formal curriculum, as currently construed, does not seem to be the most effective conduit for this kind of sustainable learning. For example, a survey among secondary school pupils in the UK discovered that they were turned off by learning about environmental issues in citizenship lessons (Oxfam, 2006:6). This probably says more about the way these young people were being taught than the content as the same survey suggested that students wanted issues tackled in

‘more depth’ and ‘to discuss more in smaller groups’ (ibid:7).

Further research by the National Foundation for Educational Research (NFER) in the UK indicates that committed and motivated teachers, combined with a supportive school ethos, made a huge difference to pupils’ attitudes to environmental issues (Morris & Schagen, 1995). There are, of course, dangers in seeing lifelong learning and formal education as a panacea for sustainability. Indeed, many argue that formal education is currently dominated by the technical/vocational model of education and its main rationale is ‘to raise skill levels and enhance the knowledge base of individuals so that they may operate more effectively in a fluctuating labour market’ (Blewitt, 2005:27).

More opportunity for EfS perhaps lies within non-formal processes where there is potential for a lifelong learning for sustainability which is critical and, emancipatory. Such processes emerge ‘from a reflexive relationship between thinking about priorities and the actual experience of living in the world, of making a living and protecting the prospects of the next generation during a period of change’ (ibid:36). Blewitt cites as examples the work in developing sustainable neighbourhoods and social inclusivity by organisations such as the Community Development Foundation and Groundwork in the UK. ‘The informal learning opportunities that these initiatives created are profoundly important aspects of non-formal lifelong learning’ (ibid:34).

The lifelong learner for sustainability needs to be part of a learning community and ‘an active and creative explorer of the world; a reflexive agent; a self-actualising agent and an integrator of learning’ (Medel-Anonuevo, Ohsako & Mauch in Blewitt, 2005:26). EfS requires a concept of lifelong learning which recognises the imperative of learning for sustainability as a shared human project in a rapidly changing world where none of us has all the answers. Opportunities for learning are all around us; as educators perhaps our main responsibility is to recognise them.

G) Making EfS an international movement

Encouragingly, some commentators such as David Orr and Andres Edwards already sense the beginnings of paradigm change in a ‘sustainability revolution’ which is taking place ‘below the radar screen and outside the cultural buzz’ (Orr, 2005:xiv in Edwards, 2005):

“It is happening first at the periphery of power and wealth, where revolutions often start. It is evident in farmers beginning to mimic natural systems in order to reserve their soil and land...It is evident

in the burgeoning interest in green building, green architecture, green engineering...It is evident in a new religious sensibility across the full spectrum, of faith traditions that regard stewardship of the Earth as obligatory...It is evident in education and the emergence of new ways to think about the human role in nature that stretch our perspective to whole systems and out to the far horizon of imagination” (Orr, 2005: xiv).

Edwards presents evidence for a growing movement of sustainability advocates across the globe and identifies five characteristics of this ‘revolution’:

- Remarkable similarities among sustainability groups in overall intentions and objectives;
- A large and diverse number of such groups;
- A wide range of issues addressed by these groups;
- Leadership by a group of decentralised visionaries rather than a single charismatic figurehead;
- Varying modes of action – oppositional and alternative (Edwards, 2005:7).

Some educationalists have had difficulties with the idea of being part of a movement as they felt that it had implications of being partisan and ideologically biased. Yet engagement with EfS necessarily involves working toward a more equitable and environmentally sustainable society. However, it is important to recognise that this is a process where no one group, ideology, sector or country has all the answers. Therefore it is perfectly possible, indeed, I would argue, essential to be part of an open-minded movement which is advocating as well as seeking change.

Conclusion

Many people and organisations across the world see the broad framework of EfS as an opportunity to place themselves and their work in the context of a movement. There is much to be gained from this, including a sense of solidarity, the potential for sharing ideas and learning from different global perspectives. The UN Decade for ESD can assist by providing a framework for network building, events and initiatives. The internet too provides a powerful tool for communication and building networks, such as the ‘E-learning community’ of students and alumni which forms part of LSBU’s EfS programme. Building a movement takes time but with the growing

awareness of the effects of climate change, the core enthusiasts of EfS may suddenly find themselves in demand as leaders of a rapidly expanding movement.

To some extent this is happening already with an increasing demand for courses and awareness raising on issues of sustainability from a wide range of sectors. It is becoming clear that we will need to raise our game over the next decade if EfS is to become a dynamic process which can enable us all to learn to live sustainably. Human beings are very adaptive and intelligent beings who have learned to live unsustainably in rather a short space of time. Time is of the essence as it has become clear that some of the effects of climate change are already unstoppable. Our challenge for the future well-being of the planet and of human life is to learn – very quickly – how to live sustainably.

(This article is a condensed version of chapter one from a forthcoming publication by the EfS programme at London South Bank University *Journeys around EfS* edited by Jenneth Parker and Ros Wade. Visit www.lsbu.ac.uk/efs.)

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EDUCATION AND SUSTAINABLE DEVELOPMENT

Elaine Nevin addresses the role of education in achieving sustainable development and explores the relationship between development education (DE), education for sustainable development (ESD) and environmental education (EE) in an Irish context. The article examines how these three ‘educations’ can develop and grow, and considers examples of ‘good practice’ in ESD in the context of Irish national policy frameworks, particularly focusing on how ESD can fit into these frameworks.

What is sustainable development?

The concept of sustainable development emerged as a response to a growing concern about human society’s impact on the natural environment. The concept of sustainable development was defined in 1987 by the Brundtland Commission (formally the World Commission on Environment and Development) as ‘development that meets the needs of the present without compromising the ability of future generations to meet their own needs’ (Brundtland, 1987). This definition acknowledges that while development may be necessary to meet human needs and improve the quality of life, it must happen without depleting the capacity of the natural environment to meet present and future needs. The sustainable development movement has grown and campaigned on the basis that sustainability protects both the interests of future generations and the earth’s capacity to regenerate. At first it emphasised the environment in development policies but, since 2002, has evolved to encompass social justice and the fight against poverty as key principles of sustainable development.

There are two commonly used visualisations of how the various aspects of sustainable development interact: one is of three overlapping circles representing the three pillars of sustainable development - economy, society and environment (fig 1.a). The other shows the economy embedded in society, which in turn is embedded in the environment (fig 1.b). The latter focuses on the central role that the environment plays in human society and in turn in the economy.

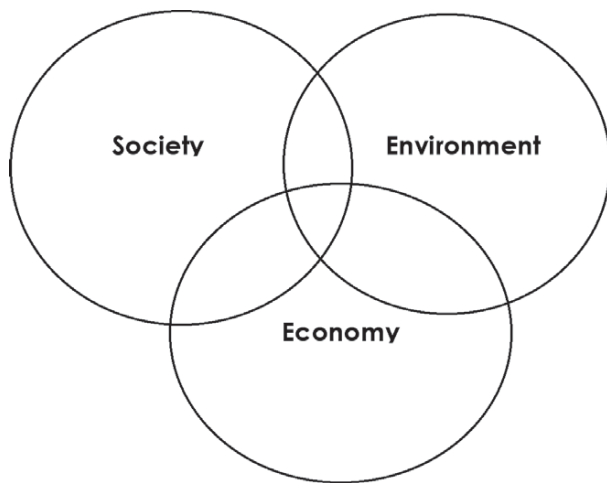


Fig 1.a. Overlapping pillars of Sustainable Development

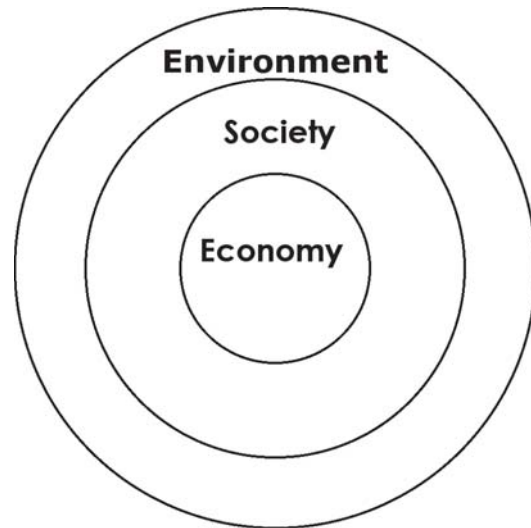


Fig 1.b. Concentric circles visualization of Sustainable Development

The underlying concepts of sustainable development are defined by Agenda 21, which is the Action Programme for the 21st century adopted by governments at the United Nations Conference on Environment and Development (also known as the Earth Summit) in 1992. The Summit confirmed its resolve to promote the three pillars of sustainable development as interdependent and mutually reinforcing concepts.

What role does education play in sustainable development?

Good quality education is an essential tool for achieving a more sustainable world. This was emphasised at the UN World Summit in Johannesburg in 2002 where the reorientation of current education systems was outlined as key to sustainable development. Education for sustainable development (ESD) promotes the development of the knowledge, skills, understanding, values and actions required to create a sustainable world, which ensures environmental protection and conservation, promotes social equity and encourages economic sustainability. The concept of ESD developed largely from environmental education, which has sought to develop the knowledge, skills, values, attitudes and behaviours in people to care for their environment. The aim of ESD is to enable people to make decisions and carry out actions to improve our quality of life without compromising the planet. It also aims to integrate the values inherent in sustainable development into all aspects and levels of learning.

There are a number of key themes in ESD and while the dominant focus is on environmental concerns, it also addresses themes such as poverty alleviation, citizenship, peace, ethics, responsibility in local and global contexts, democracy and governance, justice, human rights, gender equality, corporate responsibility, natural resource management and biological diversity. It is generally accepted that certain characteristics are important for the successful implementation of ESD, reflecting the equal importance of both the learning process and the outcomes of the education process (adapted from ‘UN Decade of Sustainable Development’ UNESCO Nairobi Cluster, 2006). ESD should:

- **Be embedded in the curriculum in an interdisciplinary and holistic manner**, allowing for a whole-institution approach to policy making;
- **Share the values and principles** that underpin sustainable development;
- **Promote critical thinking, problem solving and action**, all of which develop confidence in addressing the challenges to sustainable development;
- **Employ a variety of educational methods**, such as literature, art, drama and debate to illustrate the processes;
- **Allow learners to participate in decision-making** on the design and content of educational programmes;
- **Address** local as well as global issues, and avoid jargon-ridden language and terms;
- **Look to the future**, ensuring that the content has a long-term perspective and uses medium and long-term planning.

To promote ESD, the United Nations Decade of Education for Sustainable Development, 2005-2014, (DESD) was adopted by the UN General Assembly with the United Nations Educational, Scientific and Cultural Organisation (UNESCO) designated as the lead agency for promotion throughout the decade. The decade pursues a global vision ‘of a world where everyone has the opportunity to benefit from quality education and learn the values, behaviour and lifestyles required for a sustainable future and for positive societal transformation’ (www.unesco.org/education/desd).

The goal of the decade, as outlined by UNESCO, is to integrate the principles, values and practices of sustainable development into all aspects of education and learning. This aims to encourage changes in behaviour that will create a more sustainable future. One of the most important aspects of the DESD is the recognition that ESD must engage a wide

range of stakeholders from government, private sector, civil society, non-governmental organisations and the general public.

In its International Implementation Scheme (IIS) for DESD, UNESCO states that ESD is fundamentally about values, particularly respect for others, including those of present and future generations, for difference and diversity, for the environment and for the planet's resources (UNESCO, 2006). Education enables us to understand ourselves and others and our links with the wider natural and social environment; this understanding serves as a durable basis for building respect. Along with a sense of justice, responsibility, exploration and dialogue, ESD aims to move us toward adopting behaviours and practices which will enable us all to live a full life without being deprived of basic human needs.

Overview of good practice in Ireland

In February 2007, ECO-UNESCO undertook a research project on behalf of Comhar SDC (Sustainable Development Council) on education for sustainable development in Ireland (ECO-UNESCO, 2007). The research remit included the United Nations Economic Commission for Europe (UNECE) Strategy on ESD, European Union (EU) and Irish government policy frameworks, international case studies, and an overview of existing good practice in ESD in Ireland. The research methodology included a questionnaire based survey, adapted from the UNECE guidelines on good practice initiatives, and desktop research to identify examples of good practice projects and programmes in the area of ESD in Ireland.

The questionnaire was circulated to a wide range of groups in the formal and non-formal education sectors, including subject associations, subject support services, teachers' unions, education centres, Vocational Education Committees (VECs) and youth organisations. Target groups also included non-governmental organisations (NGOs) working in the environmental, development, human rights, community and voluntary sectors, and businesses associations including the Irish Small Firms Association, the Irish Small and Medium Enterprise association, the Irish Business and Employers Confederation (IBEC) and others.

According to UNECE, projects and initiatives are considered good practice if they are closely related to ESD, generate ideas and contribute to policy development. They must have some of the following outcomes and characteristics:

- Focus on educational and learning dimensions of sustainable development;

- Innovative development of new and creative solutions to common problems;
- Make a difference and have a tangible impact on those concerned;
- Have a sustainable effect;
- Have the potential for replication;
- Support evaluation in terms of innovation, success and sustainability.

Although the questionnaire response rate was relatively low (out of approximately 1,200 questionnaires circulated by email, 45 completed surveys were received) it did reflect a higher level and greater diversity of initiatives and providers in the area of ESD than had been anticipated. The highest response rate came from the environmental sector reflecting a wide range of programmes in formal, non-formal and informal education. ESD's traditional associations with environmental education (EE) have allowed it to consolidate existing links in countries where EE strategies are in place. These associations are based on ESD's placement of the environment at the centre of sustainable development.

There was a low response rate from some of the sectors approached including the business, media, community and voluntary sectors, most likely due to the perception of ESD as a primarily environmentally-oriented concept. However, this assertion cannot be fully verified as the low response could also be attributed to other factors such as heavy workloads.

The research project on ESD highlighted some examples of good practice within the formal, non-formal and informal sectors such as the ECO-UNESCO's Young Environmentalist Awards programme and the Green Schools programme (known as 'ECO-Schools' internationally). ESD initiatives in further education highlighted by the research included West Cork Permaculture's 'Permaculture Design' course, Clare Adult Education Centre's 'Environmental Trends and Impacts' programme, Kimmage Development Studies Centre's 'Economics of Sustainability' programme and ECO-UNESCO's Further Education and Training Awards Council (FETAC) accredited module entitled 'Introduction to Sustainable Development'. In the youth sector, the National Youth Development Education Programme and the ECO-UNESCO 'Youth for Sustainable Development' programme were acknowledged as good practice initiatives in youth work.

Other programmes and initiatives included the Trócaire and City of Dublin Vocational Education Committee (CDVEC) Curriculum Development Unit Citizenship Studies Projects, the Royal Institute of the Architects of Ireland Continuing Professional Development programme, the Just Forests 'Wood of Life', the Global Action Plan (Cork) 'Ecosaver programme' and

the Cultivate Centre in Dublin, which runs various courses including the Community Powerdown Toolkit.

In initial teacher training the work of the Ubuntu Network, based in the University of Limerick, was highlighted based on its support of the integration of development education (DE) and ESD into post-primary Initial Teacher Education (ITE) in Ireland. The Development and InterCultural Education (DICE) project also works in ITE at primary level. A significant development since the compilation of the research project has been the certification of a Regional Centre for Expertise at the University of Limerick following an application led by the Ubuntu Network in conjunction with DICE on behalf of a network of groups (<http://www.ubuntu.ie/>).

The research project also identified potential new opportunities for the delivery of ESD within the education system. For example, at present there are opportunities available within the primary school curriculum, in subjects such as social, environmental and scientific education (SESE) and social, personal and health education (SPHE) to promote ESD. Moreover, the nature of the curriculum and the flexibility of class timetabling allow the teacher to focus on the interrelationship between subject areas, which makes the integration of an ESD approach easier.

The secondary school system offers some opportunities for the integration of ESD, however, second level timetabling and structure do not easily allow for links to be made between subject areas, which is an integral element of ESD. Curriculum areas such as civic social and political education (CSPE), geography, science, social, personal and health education and some areas of business studies provide the best opportunities for ESD integration. There are new developments in the Senior Cycle with a review underway highlighting available opportunities for the delivery of ESD.

Traditionally the higher education system in Ireland has comprised the university sector, the technological sector and the colleges of education, all of which are autonomous and self-governing, although substantially funded by the state. In recent years, a number of independent private colleges have appeared and grown although there has been limited progress in some third level institutions in addressing the issue of a whole school approach to ESD. On the other hand, many third level institutions have introduced courses in sustainable development: the Masters of Science in Sustainable Development at the Dublin Institute of Technology, the new doctoral programme at University College Dublin, Waterford Institute of Technology's Sustainability and Environmental Awareness For All (SEAA), Tipperary Institute's Bachelor of Arts programme in Rural Development and American Business College's module on sustainable business. These courses and programmes are often oversubscribed and interest is growing

all the time. It is also important to note that some education initiatives are leading to action on ESD issues. There are a growing number of organisations becoming involved in various cross-cutting themes, such as climate change.

At an international level, there are varying degrees of work underway in the area of ESD. In 2005, UNECE member states adopted the UNECE Strategy for ESD (UNECE, 2005) as an operational tool to implement ESD which committed governments to incorporate sustainable development themes into their formal, non-formal and informal educational systems. As a result, there are now many countries in the EU where national action plans and strategies in ESD have been developed and are being implemented. The UK's Sustainable Development Education Panel developed a draft strategy in 2003, which continues to be used as a foundation for sustainable development action plans in different departments (The Sustainable Development Education Panel, 2003). Among other countries which have completed implementation plans for the Decade of ESD are Finland and the Netherlands (Finnish National Commission on Sustainable Development, 2006; Ministerie van LNV, 2004). Beyond Europe, Australia, New Zealand and Canada have a strong tradition of environmental protection and conservation, with Australia having just published a new strategy for the Decade (Department of the Environment and Heritage, 2006).

The research also explored existing frameworks in Irish and EU contexts and explored areas where ESD could build on existing work and be incorporated therein. Ireland does not have a strong tradition of environmental education in terms of government policy. This is unusual compared to the rest of Europe and countries such as Australia and Canada where ESD has built on environmental education. In Ireland however, there is a strong tradition of development education as reflected in the new Irish Aid strategy on development education which also provides useful opportunities for exploring ESD (<http://www.irishaid.gov.ie>).

The process of developing a National Strategy of Education for Sustainable Development is underway in Ireland which will provide a framework for ESD implementation in tandem with a review of the National Strategy of Sustainable Development. Comhar's recommendations on the review of the National Sustainable Development Strategy include the implementation and resourcing of an action plan for ESD, the embedding of ESD principles in the curriculum at all levels, the integration of ESD into professional training at all levels, and adequate and appropriate recognition of ESD's importance within the strategy (Comhar SDC, 2007). The National Steering Committee on Education for Sustainable Development comprises representatives from a variety of organisations including three major government departments: the Department of Environment, Heritage

and Local Government, the Department of Education and Science and the Department of Foreign Affairs. This is an example of a collaborative working model between departments and provides an excellent opportunity for the growth of education for sustainable development in Ireland.

What is the relationship between ESD, EE and DE?

The relationship between environmental education, education for sustainable development and development education is complex, and the three often display more similarities than differences. All three are essentially concerned with behavioural change through education and the promotion of values, attitudes and understanding. A core value promoted by the three sectors is respect: respect for yourself, respect for others, respect for the world we live in and respect for the planet. However, a closer examination of each sector suggests that each has a primary aim or focus that sets it apart from the others.

Environmental education developed from the concern that human development was having profoundly damaging effects on the natural environment and its primary aim is the protection and conservation of the environment including natural habitats and ecosystems. Development education's primary concern is the reduction of poverty, the promotion of social justice and the improvement of quality of life for people. It addresses basic human needs and links local and global actions.

Development education focuses on interdependence and interconnectedness between people on both a global and local perspective but does not traditionally extend this to ecosystem interdependence or specific environmental concerns. DE primarily focuses on social issues of human rights, social injustice, human poverty and world citizenship. It is concerned with the building of knowledge, understanding, skills, attitudes, values and behaviours necessary to enable people to critically examine the world, its development and to act to make it a more just and equitable place. It has much in common with other forms of social and political education (DCI, 2003). Human rights education, peace education, multicultural education, education on race and race issues, environmental education and ultimately citizenship education all have overlapping features and concerns with development education, although each has its own distinct character and focus.

Education for sustainable development's primary concern is the improvement of the quality of life for people without damaging the environment. Therefore although all three 'educations' have much in common they differ in their primary goal. The relationship between ESD

and other educational sectors is the subject of ongoing debate with the latter often regarding ESD as being ‘part of’ their education. Moreover, what many regard as the closest sector to ESD - environmental education - is not necessarily content to be seen as an equivalent to ESD. Many believe that ESD should embrace all these educational sectors to a certain level and, with sustainable development assuming increasing importance in policy and educational contexts, there will be a need for each of these sectors and their practitioners to explore more closely the commonalities between them.

Education for sustainable development expands upon the social and human rights dimension in DE and other educational sectors to include a strong environmental focus. ESD shares many similarities with DE and addresses issues such as climate change, oil shortages, water pollution, the need to maintain biodiversity as well as poverty alleviation and human rights. ESD and DE also employ similar methodologies including: critical thinking and problem solving, experiential learning, role play, guided interpretation, debate, futures thinking and participatory decision making. ESD also helps to develop links between the lives of people locally and in the developing world and encourages us to link our actions at a local level to the needs and management of the planet and its population.

The underlying principles of ESD as outlined by UNESCO highlight the importance of respect and care for life in all its diverse forms: this involves the protection and restoration of the earth’s ecosystems, respect for the dignity and human rights of people, respect for the rights of future generations and respect for cultural diversity.

On the basis of the inter-sectoral relationships described above can we suggest that ESD is the umbrella for many of the other ‘educations’ or is ESD an element of all these ‘educations’? This question is likely to sustain further debate but we can suggest that in the future these forms of education begin to identify areas of commonality with each other, begin to work more collaboratively in areas of common good and work more closely to achieve their goals. Each sector may be concerned with an ultimately different goal but working together in the achievement of areas of common good is likely to result in a more strategic approach and more beneficial outcomes. Education for sustainable development can provide the space for this collaborative work to unfold.

Education for sustainable development in ECO-UNESCO

ECO-UNESCO is an environmental education and youth organisation. As such, the environment plays a central role in the definition of ESD, while still placing great importance on the education of young people which is

participative, inclusive and facilitates their own decision-making. As an affiliate of the World Federation of UNESCO clubs, centres and associations, ECO-UNESCO places great importance on a global perspective in our conception of education for sustainable development to examine how our actions are connected to the world at local, national and international levels.

Central to all of the work of the organisation is the empowerment of young people and the protection and conservation of our environment from a local and global perspective. The aims of the organisation are to raise environmental knowledge, awareness and understanding in young people, the promotion of the protection and conservation of the environment, and the personal development of young people (<http://www.ecounesco.ie>). In essence ECO-UNESCO examines the ‘bigger picture’ in respect to issues such as environment, development and global justice. This ‘bigger picture’ is translated into local and personal action by enabling young people, their leaders and their teachers to explore the links between their lives, the environment and the global context.

Moreover, ECO-UNESCO’s work is innovative and has tried over the years to develop programmes and services that are coherent, engaging, empowering and support the development of skills in critical thinking and analysis. Examples of the programmes delivered by ECO-UNESCO include the Young Environmentalist Awards which encourage groups to undertake a local environmental action project to encourage citizenship as well as the development of skills and awareness raising in environmental protection. The ethos of the ECO-UNESCO club is to encourage groups of interested young people to participate in local environmental protection with the opportunity to link with the international network of UNESCO clubs and centres. These clubs and centres are located in the global North and South and provide an opportunity for young people to develop links in the developing world.

Education for sustainable development also works toward social inclusion and this is the focus of ECO-UNESCO’s ECO-Choices programme, a drugs prevention and awareness initiative that highlights the environment’s key role in the well-being of people and delivers empowering environmental action projects to young people. The ECO-Choices programme uses action projects, outdoor education and personal development work to encourage young people to take an active role in their environment.

One of the most recent ECO-UNESCO programmes is the Youth for Sustainable Development programme. This uses a variety of methods to inspire, empower and engage young people in sustainable development. The programme comprises a peer education programme, which is a youth-led initiative where young people between the ages of 12 and 18 are given the

opportunity to develop knowledge of their environment and learn skills to communicate and engage with their peers. This programme also includes a whole organisation approach manifested in the development and delivery of a training course for organisations primarily focused on the youth sector with an opportunity to expand to other sectors. This will include a sustainability audit whereby organisations will be encouraged to review their practices and develop policies and programmes that promote sustainable development.

A third element of this programme is exchange. As an affiliate of the World Federation of UNESCO Clubs, Centres and Associations (WFUCA), we place great emphasis on the global perspective of ESD where our actions are connected to the world at a local, national and international level. This will provide young people with the opportunity to create links with young people in a developing country through the UNESCO club network. Another element of the programme is the development of an ESD newsletter and webpage (http://www.ecounesco.ie/youth_sustainable.aspx). The programme covers many of the elements of ESD where global and local dimensions are addressed. Consultation with young people prior to delivery enables us to feed their views into the programme content. The programme also works with some 'at-risk' youth groups and therefore aims to ensure its relevance to those in more marginalised communities.

Programmes like Youth for Sustainable Development are good examples of education for sustainable development. They address the needs of the target group and provide them with an opportunity to feed into the programme development. The methods used in the programmes are transferable to any ESD programme including schools' initiatives and community development work. Moreover, the development of practical skills such as teamwork, communication skills and critical thinking is also encouraged. The local to global dimension is also important to any ESD project to promote understanding that local actions can have global consequences.

Conclusion

An overview of ESD in Ireland shows that the quality of programmes and work delivered is of a very high level. Moreover, the diversity of programmes offered at present provides a good basis for any action plan on education for sustainable development and useful opportunities for inter-sectoral collaboration on common issues and areas. The debate about the relationship between ESD, EE and DE looks set to continue but in the short-term these education sectors need to network, share their practice and learn from each other.

Stop Climate Chaos, a climate change campaign network, has brought together a variety of organisations - environmental, development, youth, church, etc. - to campaign together for the reduction of greenhouse gases. This is a good example of inter-sectoral co-operation on an issue of common concern where the groups involved have agreed on strategies to achieve the network's primary aim of introducing a climate change law to reduce greenhouse gas emissions, limit global temperature increases to two degrees or less, and support developing countries to adapt to climate change.

Each of the groups involved in the campaign may be drawn from different sectors and have different reasons for affiliating, but are working together for a common good. The climate change campaign could serve as a model of good practice for environment, development and sustainable development educators in how they can work together in a network for the pursuit of shared goals. Innovation and new projects in ESD and across all related education sectors need to be encouraged and developed to engage civil society groups in actions toward a sustainable world.

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Further details on any of ECO-UNESCO's programmes and services can be found on www.ecounesco.ie, by phoning: +353 1 6625491 or by emailing: info@ecounesco.ie.

Perspectives

SUSTAINABLE EDUCATION – TOWARDS A DEEP LEARNING RESPONSE TO UNSUSTAINABILITY

Stephen Sterling

“This century may well be one of relearning on a grand scale across society...necessitating a metamorphosis of many of our current education and learning constructs” (Williams, 2004:4).

It was early 2001, and the publisher of the Schumacher Briefings and I were having a chat in his office about the title of the new education Briefing. I had just made a bid for ‘Sustainable Education’. His reply was along the lines: ‘surely, you mean “education for sustainable development”, or “education for sustainability” don’t you? Are you implying “education that lasts?” - it doesn’t make a lot of sense’.

‘No’, I said, ‘I don’t want to call it education ‘for’ anything, and yes, ‘Sustainable Education’ is exactly the title I want’. The reason I went for this title, is that I wanted it to provoke a little cognitive dissonance and the question: ‘what does *that* mean?’. I wanted people to move from ‘how do we educate for sustainable development’ towards deeper attention to *education* itself: its paradigms, policies, purposes and practices (these are linked of course) and its *adequacy* for the age we find ourselves in. In the Briefing, I define sustainable education as:

“a change of educational culture, one which develops and embodies the theory and practice of sustainability in a way which is critically aware. It is therefore a transformative paradigm which values, sustains and realises human potential *in relation to* the need to attain and sustain social, economic and ecological well being, recognising that they must be part of the same dynamic” (Sterling, 2001:22).

I came to this position through some 30 years of working in environmental and sustainability education – increasingly realising that sustainability logically necessitates a deep learning response in educational thinking and practice as it does in myriad other human activities, whether

economics and business, design and construction, agriculture and energy, trade and aid, health and so on. Ever since the United Nations Conference on the Human Environment (Stockholm, 1972) education has been identified in international conferences, reports and agreements as key to addressing environment and development issues. Yet, over three decades later, most education still makes little or no reference to these issues. At the same time, sustainability issues are becoming ever more critical. It seems education is a slow learner! In fact, I would argue that formal education largely remains part of the problem of unsustainability. I acknowledge and greatly welcome the much higher profile that ‘education for sustainable development’ (ESD) has achieved in the last couple of years or so – bolstered significantly by the UN Decade of ESD – but this apparent progress may mask the deeper challenge, not least as ‘ESD’ hides an uncomfortable tension between accommodating and radical transformist approaches.

We need to recognise the underlying factors and ideas which still make most educational practice a servant of the past, and – importantly – articulate a persuasive and practicable alternative. As regards the first challenge, I would point to the continuing influence of reductionism, objectivism, materialism and dualism allied to an uncritical and growth-oriented consumerist culture. These ideas might not be consciously recognised by most practising educators, but they are no less powerful. They are part of the subterranean geology of education, invisible but reflected in the educational landscape above the surface: single disciplines, separate departments, abstract and bounded knowledge, belief in value-free knowing, privileging of cognitive/intellectual knowing over affective and practical knowing, transmissive pedagogy, analysis over synthesis, and so on.

As regards the second challenge, I argue that we need an educational culture and practice adequate and appropriate to the volatile, densely interconnected, and dangerously vulnerable world that we have created. Instead of educational thinking and practice that tacitly assumes that the future is some kind of linear extension of the past, we need what I call an *anticipative* education, recognising the new conditions and discontinuities which face present generations, let alone future ones: the massive challenges of global warming, species extinction, economic vulnerability, social fragmentation and migration, endemic poverty, the end of cheap energy, and more positively, the rise of localism, participative democracy, green purchasing, ethical business, and efforts to achieve a low carbon economy. The heart of such an education is an ecological orientation. Other descriptors which help capture this sense are ‘holistic’, ‘systemic’ and ‘participative’; they indicate a redesigned educational paradigm that is in essence *relational*, engaged, ethically oriented, and locally and globally relevant.

Mary Catherine Bateson suggests:

“Our machines, our value systems, our educational systems will all have to be informed by (the) switch, from the machine age when we tried to design schools to be like factories, to an ecological age, when we want to design schools, families and social institutions in terms of maintaining the quality of life, not just for our species, but for the whole planet” (Bateson, 1997:84).

Hence, the concept of ‘sustainable education’, a term which suggests not just a simple ‘add-on’ of sustainability concepts to some parts of the curriculum, but a cultural shift in the way we see education and learning. Rather than a piecemeal, bolt-on, fragmentary response which leaves the mainstream otherwise untouched, it implies systemic change in thinking and practice, informed by what can be called more ecological thinking and values – essentially a new paradigm emerging around the poles of holism, systemic thinking, sustainability and complexity. This offers the possibility of education that is appropriate and responsive to the new systemic conditions of uncertainty and complexity that are reflected in the headlines everyday; one that nurtures the increasingly important qualities of adaptability, creativity, self-reliance, hope and resilience in learners.

In writing the 2001 Briefing *Sustainable Education*, I tried to indicate why we need to critique the narrow instrumentalism and managerialism that has affected so much educational thinking and practice. I outlined the possibility of a unifying theory of education and learning which integrates the best of past liberal education practice with the newer emphases on transformative learning, capacity building, creativity and adaptive management that are considered part of the new sustainability agenda, and suggested steps to help achieve constructive change at all levels.

Sustainable education implies four descriptors: educational policy and practice which is sustaining, tenable, healthy and durable.

- *Sustaining*: it helps sustain people, communities and ecosystems;
- *Tenable*: it is ethically defensible, working with integrity, justice, respect and inclusiveness;
- *Healthy*: it is itself a viable system, embodying and nurturing healthy relationships and emergence at different system levels;
- *Durable*: it works well enough in practice to be able to keep doing it.

There is nothing particularly mysterious about this. In the nineties

imposition of managerial and economist values on education, evidenced in the whole panoply of endless testing, inspection, precise learning outcomes, performance indicators, marketisation and so on, and in the disillusion and mounting stress levels that accompanied this drive, we were in danger of losing our sense of authentic education, of caring, of community, of engagement, of empowerment and meaningful purpose. Consequently, an ecological view implies *putting relationship back into education and learning* - seeking synergy and coherence between all aspects of education: ethos, curriculum, pedagogy, management, procurement and resource use, architecture and community links. The emphasis is on such values as respect, trust, participation, community, ownership, justice, participative democracy, openness, sufficiency, conservation, critical reflection, emergence and a sense of meaning: an education which is sustaining of people, livelihoods and ecologies.

Unfortunately, the term ‘sustainable education’, with a few welcome exceptions, has often been bundled in by writers as synonymous with ‘sustainability education’, ‘education for sustainability’ and ‘ESD’. These terms represent worthy developments but do not necessarily connote the need for deep change in educational values, assumptions and practices. In response to the crisis of unsustainability, most educators – and increasingly, politicians - will ask ‘what learning needs to take place amongst students?’ This is a perfectly valid and important question, but it begs a prior and deeper question: what changes, and what learning needs to take place amongst policymakers, amongst senior management, amongst teachers, lecturers, support staff, amongst parents, amongst employers, etc., so that education itself can be more transformative and appropriate to our times?

The first question stays within what learning theorists call *first order change*, that is, more of the same: change which doesn’t affect the system as a whole. But what if the system itself needs changing? This invokes at least *second order change* which involves a re-examination of assumptions - towards a shift of consciousness, a changed intelligence which is both connective and collective. This is a deeper and systemic learning response, which needs to happen in three areas: personal, organisational and the community (social learning beyond formal education). The most resistant area is change in the institution and organisation but this is being squeezed by growing awareness of individuals at one level; and evident shifts in social values and behaviours at the level of community and public debate.

Envisioning this change and taking realisable, practicable steps in our own working contexts is key. In essence, what we all are engaged in here is a critically important second order ‘learning about learning’ process; one which will directly affect the chances of a more sustainable future for

all. As a United Nations Educational, Scientific and Cultural Organisation (UNESCO) report points out (2002), just as we have learnt to live unsustainably, we now need to learn how to live sustainably. Such learning for *respons-ibility* requires educational systems, institutions and educators to develop *response-ability* – that is, the competence and will to address the considerable challenge and opportunity that sustainability presents. This is the context for any meaningful discussion about the role of education in the 21st century.

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THE WHOLE-SCHOOL APPROACH TO EDUCATION FOR SUSTAINABLE DEVELOPMENT: FROM PILOT PROJECTS TO SYSTEMIC CHANGE

Lucy G. Hargreaves

The policy rhetoric surrounding education for sustainable development (ESD) consistently advocates a holistic and integrated approach to the implementation and practice of ESD in the formal education system. It is increasingly apparent, however, that this approach is not commonly adopted with positive examples largely limited to pilot projects or model schools implemented under the auspices of non-governmental organisations (NGOs) or individual advocates of ESD, rather than in a systemic and coordinated manner. This article will outline a whole-school approach, to ESD that includes examples where such an approach has been successfully implemented and highlights some of the key challenges that must be addressed to make the widespread adoption of the whole-school approach to ESD a reality.

Whole-school approach

A whole-school approach to ESD calls for sustainable development to be integrated throughout the formal sector curriculum in a holistic manner, rather than being taught on a stand alone basis. This philosophy supports the notion that ESD is education *for* sustainable development rather than education *about* sustainable development. In practice, this approach means that a school will incorporate teaching and learning for sustainable development not only through aspects of the curriculum, but also through sustainable school operations such as integrated governance, stakeholder and community involvement, long-term planning, and sustainability monitoring and evaluation. Whole-school approaches also advocate for active and participatory learning, a hallmark of ESD, and call for the entire school, including students, educators and administrators, to be actively engaged in working towards a sustainable school with ESD fully integrated into the curriculum as the driving factor.

Various documents and declarations at the international, regional and national levels support this whole-school approach to ESD implementation. United Nations Educational, Scientific and Cultural Organization (UNESCO's) International Implementation Scheme for the Decade of Education for Sustainable Development (2005) states that ESD should be

interdisciplinary, holistic and participatory, with ‘learning for sustainable development embedded in the whole curriculum, not as a separate subject’ (UNESCO, 2005:4).

Similar statements have been made at the regional level. For example, Education and Environment Ministers from across Europe adopted a Regional Strategy for ESD in 2005 that was developed by the United Nations Economic Commission for Europe (UNECE) in consultation with numerous stakeholders. Recommendations included working towards a whole-school approach to ESD in the formal education system, whereby ‘pupils and students, teachers, managers and other staff, as well as parents, should follow principles of sustainable development’ and integrate ESD themes across the curriculum (UNECE, 2005). Similar recommendations were made in the Asia-Pacific Regional Strategy for the Decade of ESD, which advocated, among other things, a holistic approach to the incorporation of sustainable development themes into the curricula of formal education systems (UNESCO, 2005a).

These international commitments and declarations for an integrated approach to ESD have been echoed in national ESD policy statements in many nations. Australia’s National Statement for the United Nations Decade of ESD, for example, advocates cross-disciplinary studies and integration of sustainable development in key learning areas that provide opportunities for participation and action (Australian Department of Environment and Heritage, 2006). Finland maintains that sustainable development must be included in all subjects and that the entire operational culture of a school must support learning for sustainable development (Finnish National Commission on Sustainable Development, 2006). The United Kingdom echoes this approach and has advocated for the integration of sustainable development throughout the curriculum and through the management and operations of school facilities, such as transport, food and buildings (UK Department of Education and Skills, 2005). These approaches provide students, teachers, and other staff members with opportunities to be active participants in the learning process.

The whole-school approach: from pilot projects to systemic change

Despite widespread support for this approach to ESD at national and international levels, there are relatively few concrete examples of schools in which this approach has been systematically implemented. A more common trend appears to be partial implementation of just a few aspects of ESD as curriculum add-ons or experiential learning units. While these

approaches provide useful learning opportunities for students, they fall well short of achieving the objective of a whole-school approach to ESD. Where examples of the whole-school approach do exist, they tend to be pilot projects in individual schools rather than a system-wide or school-board approach to implementation.

An example of a successful pilot project is the Australian Sustainable Schools Initiative (AuSSI), which is a partnership between the Australian Government, States and Territories that aims to support schools and their communities in becoming sustainable through a whole-system and whole-school approach to sustainability. AuSSI promotes the active engagement of stakeholders in programme development and management, including students, teachers, administrators, and communities. AuSSI started as a pilot initiative in 2001 and recently received government endorsement to expand and consolidate beyond the pilot stage in several States and Territories. Over 2,000 schools now participate in the Initiative, providing a potential model for other jurisdictions on how to expand beyond the pilot stage.

The International Eco-Schools Programme also takes a holistic, participatory approach to learning for sustainability. The aim of the Programme is to engage students through classroom study, school and community action to raise their awareness of sustainable development issues. Eco-Schools provide an integrated system for the environmental management of schools and involve all stakeholders in this process. After a period of participation, each school participating in the Programme is assessed; successful schools are awarded a 'Green Flag', a recognised eco-label for environmental education and performance. Initially a European programme, Eco-Schools are now represented in almost all European Union member states, various countries in Central and Eastern Europe, and some pilot projects in Japan and other parts of the world.

Finland provides an example of a country in which the whole-school approach is more systematically implemented in the formal education system than most other Organisation for Economic Co-operation and Development (OECD) nations. Seven cross-cutting themes penetrate all formal subjects in the Finnish school curriculum at primary and secondary levels. These themes include development education, cultural identity, internationalism, responsibility for nature and sustainable development (Finnish National Commission on Sustainable Development, 2006). These themes help to define the operational culture of schools and include cultural identity, participatory citizenship, responsibility for the environment, sustainable development and media skills (Houtsonen, 2005).

Key challenges and opportunities

Despite the success of the programmes noted above, significant challenges remain in transitioning the whole-school approach to ESD from the pilot stage to a wide-spread systemic implementation in the formal education sector.

Time and resource constraints are identified by teachers and school administrators as common barriers to ESD implementation. Adopting a whole-school approach to teaching and learning is viewed by many as simply impractical given current constraints on teachers' time within already overcrowded curricula (Henderson & Tilbury, 2004; Learning for a Sustainable Future, 2006; Jackson, 2007). ESD continues to be conceptualised by many practitioners as an 'add-on', rather than a holistic change in teaching and learning practices. To obtain support from school administrators, governments and teachers alike, it is necessary to highlight the importance of curricula integration, rather than the creation of new courses. It is also critical to underscore to decision makers the cost savings that can ensue from more sustainable operations within schools.

Leadership challenges, both within schools and within their larger administrative communities, are prevalent in moving toward a more systemic approach to ESD in schools, a trend articulated in a recently released report (Jackson, 2007). Results of this study show that those leaders who develop sustainability within their schools are motivated by a personal passion for sustainability. The same study noted a lack of priority for sustainable development within many local government authorities and a consequent lack of institutional support for implementation of ESD in schools. It is critical that governments harness the energy and commitment of individual leaders, communities and NGOs who support the whole-school approach to ESD to drive a more systemic implementation of ESD for a greater impact. Enhanced leadership could create the governance structure necessary to ensure the longevity and sustainability of ESD.

Studies show gaps in appropriate pedagogy and curriculum development in teacher training, the absence of a positive vision, and a general lack of conviction that individual teacher efforts will really make a difference. Teachers also require greater capacity to undertake the immense and challenging task of implementing a whole-school approach to ESD (Sustainable Development Education Panel, 2003). Enhanced pre-service and in-service teacher training is urgently required for educators to be able to act as effective facilitators in the ESD process.

A whole-school approach to ESD presents a significant opportunity for the formal education sector. Not only can it enhance the environmental

performance of schools as institutions, but it can raise the quality of education and build a more sustainable future by imparting the values and tools that today's children and youth will need to build and maintain more sustainable societies. Commitment to change is required from all stakeholders, from grassroots activists to educators to policymakers. Only by working together at all levels can we ensure that ESD moves beyond the realm of pilot projects and individual case studies to a more system-wide catalyst for change.

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THE LEARNING AND TEACHING FOR TRANSFORMATION INITIATIVE: HELPING HIGHER LEARNING INSTITUTES PARTICIPATE

Peter Taylor & Danny Hunter

International development has not been served well by the ‘transfer of technology’, ‘top-down’ and centralised planning strategies of the past. These have largely resulted in programmes, projects and technologies that have neither been responsive to, nor addressed the needs of, those they intend to serve and the communities in which they are located. Consequently, ownership by community members of many such interventions has been weak or absent and commonly characterised by the fundamental flaw of a lack of communal participation.

Although participation is often referred to in policy statements and project outlines, it rarely extends beyond initial consultation into planning and technology validation or into genuine engagement in decision making about resource access and allocation. This omission has led to inappropriate outcomes, often perpetuating the poverty, inequality and power structures that hinder the realisation of sustainable development. On the basis of lessons learnt from the past, participation is now regarded as fundamental to the attainment of the economic, social and environmental objectives that underpin sustainable development. Effective participation supports improved analysis and problem identification, better project planning and design, and more efficient implementation, monitoring and evaluation. Development programmes that provide more opportunities and spaces for participation are more relevant and appropriate to the local context and, ultimately, become more sustainable.

The ambiguity of participation

Participation is an ambiguous term and by no means confined to international development. Participation-related strategies and projects can be found in rural and urban development programmes in the more economically advanced countries, and have become integral to the language in many fields of mainstream management. This ambiguity means that participation is open to interpretation and variability in practice. Many typologies of participation have been devised as a way of categorising levels of, or commitment to, participation (Arnstein, 1969; Pretty et al, 1995) with the recognition that

participation by default is not necessarily a good thing.

Some forms of involvement undermine rather than support effective participation (Bass et al, 1995), leading to manipulation or at best a degree of tokenism (Arnstein, 1969). In its most extreme form the practice of participation might be dangerous, open to abuse and could possibly reinforce unfair and dishonest power structures. This irresponsible use of participatory development has been extensively critiqued in academic circles (Cooke & Kothari, 2001). However such criticisms have been countered and challenged by the many participatory practitioners in the field who continue to enrich development dialogue with examples of participatory development that is relevant, ethical and responsible, but above all, effective (Hickey & Mohan, 2005). As Taylor and Fransman (2003) suggest ‘In order to promote and increase participation effectively and ethically, there is a growing need for experienced and well-trained people who are active and open to its meaning, methods and practice’.

Building capacity through Higher Learning Institutions

A major challenge for education in a globalising world is to discover forms of learning and teaching that promote the emergence of civil societies which are particular to their own social and cultural contexts, but which are also underpinned by good governance and human rights, with the ultimate goal of social justice for all members of society (Taylor et al, 2006). Capacity building is key to supporting the effective and ethical participation needed to achieve this goal. Universities and colleges that offer formal courses, as well as other institutions offering non-formal programmes, are best placed to meet this need for quality support for participatory development. Higher Learning Institutions (HLIs), through teaching, training and research, can play a pivotal role in the social, political and economic change necessary for sustainable development, but only if they are responsive to the needs of the wider community. HLIs are well placed to bridge the global with the local through participatory and collaborative learning partnerships that ensure capacity building and research are relevant to the wider community.

However, the integration of effective participatory teaching programmes into HLIs has not happened as quickly as desired and consequently, opportunities for training and research are still limited. Many higher and adult education systems lack the systemic capacity required to address the learning needs of professionals and practitioners of community and social change, particularly in an era when the world for which learners are preparing themselves is becoming ever more complex. The idea that educational institutions can serve as repositories of the knowledge

and models required for professionalism and problem-solving is in ever greater doubt. Instead, we are challenged to create more effective learning environments in which teachers and learners can develop our capacities to access, create and share knowledge, drawing both upon what is already known and recorded, but also discovering what it means to adapt, innovate, and apply our knowledge and skills within specific and rapidly changing contexts. There is much we need to know and learn, but just as importantly, we need to develop the critical skills, values and attitudes necessary to apply our knowledge effectively (Taylor et al, 2006).

Learning and Teaching for Transformation

Despite the systemic limitations in higher education, initiatives are underway to support a process of transformation within HLIs. These initiatives are creating opportunities for teachers to become facilitators in *learning collaborations* with other professional colleagues, students and community members. This, in turn, is contributing to the need for experienced and well-trained practitioners in the field who ensure effective and ethical participation (Taylor and Fransman, 2003). The Learning and Teaching for Transformation (LTT) is one such initiative which commenced in 2002 and is hosted by the Participation Group of the Institute of Development Studies (IDS). The LTT aims to:

“enhance the capacity of institutions of higher learning to develop and deliver effective education programs that contribute to a wider transformation of individuals, institutions and society. The initiative is of interest to those involved directly in education as collaborators in a mutual learning process. It is especially relevant to those involved in the preparation of individuals for engagement in fields such as development, governance and citizenship, and within sectors that aim to bring about personal and social change. It advocates forms of learning that are grounded in the principles and practices of participatory development and action research, and seeks to encourage these forms through the sharing and generation of both theory and practice” (Learning and Teaching for Transformation: www.pnet.ids.ac.uk/guides/ltt/index.htm).

The LTT is a global initiative providing a space for practitioners, scholars, teachers, learners and communities to share, debate and discuss initiatives which support learning and teaching for participatory and sustainable development. Its aims are to explore further the relationships

between education, participation and sustainable development by:

- disseminating experiences and stories related to learning and teaching for participation and transformation;
- strengthening the network of professionals and practitioners engaging in related activities;
- encouraging regional/national dialogues and exchanges;
- compiling innovations, materials and approaches;
- supporting the scaling up of processes, methods and strategies;
- developing a strong, proactive and responsive research agenda through collaboration and partnership.

Such collaborations and partnerships between HLIs and the wider community and the resultant networking and sharing have many benefits for the teaching of participatory development:

- **Researchers** gain a better understanding and awareness of problems and needs, ensuring they can respond more effectively with appropriate and sustainable solutions;
- **Communities** in turn benefit from the more relevant, realistic and accessible research and support this can provide;
- **Students** are exposed to experiential learning in practical settings and gain new skills, abilities and insights contributing to the enhanced linking of theory and practice. They gain strong insights to team working, leadership, negotiation, mediation and facilitating consensus. In turn, they become confident in communicating, analysis, synthesis and representational skills;
- Participatory and collaborative learning can help **teachers** move away from reliance on linear models of learning and knowledge transmission to facilitating processes that allow students to construct their own theories and bodies of knowledge in a more relevant and demanding context than anything that can be achieved in the classroom;
- Ultimately, through processes of critical reflection **all individuals** involved in development become more aware of how attitudes and behaviours influence the participatory process and the ethics of participation, thus becoming more effective agents of social change and sustainable development.

The LTT initiative contains an interesting selection of global case studies that describe innovative HLI-based collaborations and partnerships

which support learning and teaching of participation for sustainable development. The LTT encourages other practitioners and organisations to join the initiative to maintain the momentum of this enriching dialogue.

Further Information

For more information on the Learning and Teaching for Transformation (LTT) initiative, the thematic areas, case studies and resources visit: www.pnet.ids.ac.uk/guides/ltt/index.htm.

As a result of the ideas and practice emerging from this dialogue, the Institute of Development Studies (IDS), Sussex, now offers a new Masters of Arts in Participation, Power and Social Change. This programme aims to deepen knowledge, innovation and practice of participatory approaches for engaging people in decision-making and citizenship in diverse contexts. For further information visit: <http://www.ids.ac.uk/ids/teach/mapart.html>.

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LINK COMMUNITY DEVELOPMENT: LINKING DEVELOPMENT EDUCATION AND EDUCATIONAL DEVELOPMENT

Cathal O’Keeffe

Introduction

Link Community Development (LCD) is an international education-focused development organisation working in Ethiopia, Ghana, Malawi, South Africa and Uganda towards improving education for children. LCD works to improve schools and the quality of education they deliver to build the capacity of district departments of education so that they can better meet the needs of their schools and communities. LCD also aims to support government education policy by using lessons learned at the grassroots level to inform national and regional strategies. In the context of its development work LCD delivers two programmes with a development education perspective. The first is our Link Schools Programme (LSP) which offers schools in Ireland and the UK the opportunity to link with a school in Africa. The second is a Global Teachers Programme (GTP) that provides a personal and professional development experience for teachers centred on a five week placement in an African school.

This paper presents a brief overview of our educational programmes in Africa, of our development education programmes, and attempts to illustrate that these two aspects of our work are integrated, with each adding value to the other.

School development in Africa

LCD has adopted an explicitly rights-based approach to educational development that is underpinned by the United Nations Convention on the Rights of the Child (UNCRC). LCD believes that education is a basic human right, fundamental to breaking the cycle of poverty and creating a just society. Education increases opportunities and empowers people to participate in decision-making. LCD assists children and their communities to realise their right to quality education regardless of gender or any other disadvantaging factor.

LCD works to contribute to the achievement of the Millennium Development Goals (MDGs) by improving access to quality education, which

is central to reducing poverty and enhancing individuals' opportunities to develop and sustain meaningful livelihoods. More specifically, LCD's work contributes to the second MDG, achieving universal primary education, by working toward school improvements such as gender equality in primary education of the highest quality.

To enhance the sustainability of its work, LCD always works within legitimate local structures. We favour working in countries where there is a decentralised system with strong local government working in partnership with district departments of education. Our work takes place at a number of levels: we work with schools to enable them to improve the quality of education they deliver; we work with district departments of education to build their capacity so that they can better meet the needs of their schools and communities; and we work to inform national policy, through the development and documentation of sustainable and replicable models for planning, service delivery and capacity building at both district and school level.

LCD works within existing resource parameters and specialises in capacity building and support both at school and district level. LCD also specialises in developing and strengthening local planning, decision making, monitoring and accountability systems again at school and district level. Central to this approach is a monitoring and evaluation tool called School Performance Review (SPR; see box).

School Performance Review (SPR)

What is SPR? It is a way of finding out how well schools are performing in the areas of leadership, management, teaching quality and community involvement.

Why is it needed? Schools and district departments often have little information to show them the things they are doing well and the areas that need more attention, making it difficult to plan ahead and place scarce resources.

How is it done? Each year data is collected by LCD and district officials on different areas of school life. Once data has been collected, findings are shared with each individual school.

What is the result? SPR provides an opportunity for all education stakeholders to actively contribute to the development of their school. Schools share SPR findings with the whole community and together they can effectively plan ahead. District staff can engage with schools during the planning process.

The SPR model consists of the following annual cycle of activities:

1. Data collection using nationally-approved monitoring instruments to assess school performance against a range of quality indicators for teaching and learning, management and governance;
2. Data analysis using nationally approved quality indicators;
3. Preparation of a report for each individual school, and a summary report for each district, providing clear feedback on the quality of its performance and including specific recommendations for school improvement;
4. Facilitation of a SPR Meeting at each school which enables concerned stakeholders to engage with the report, assess the performance of their school, and plan actions for school improvement. This process culminates in the drafting of a School Development Plan for each participating school;
5. Facilitation of a district conference at which concerned stakeholders engage with the district report and plan actions for school improvement. This process culminates in the drafting of a District Improvement Plan for Education;
6. Supervised implementation of the School and District Development Plan;
7. Targeted training and capacity building activities that address needs revealed in reports.

The most recent advance in the SPR model is the addition of the ‘Child-Friendly School Instrument’. A Child-Friendly School is one which: (a) respects the rights of the child, (b) is effective and efficient, (c) is gender sensitive, (d) is healthy and (e) is a safe and protective place. The school should engage pupils in gender-specific focus groups and evaluate factors in school affecting enrolment retention such as sanitation, safety, gender sensitivity, health promotion and the quality of extra-curricular activities.

Connecting schools North and South

The Global Teachers Programme (GTP) is a 15-month programme for practicing teachers and principals. The highlight of the programme is a five-week placement in an African school (one which LCD is already supporting) where the teachers do two things: first, they help LCD with its school improvement programmes in Africa; second, they learn first-hand about life in an African school, so that when they return to Ireland they can

use the experience to teach pupils in their own schools about life in Africa and development issues.

In addition to helping LCD with its work and assisting teachers to become better development educators, the GTP also offers teachers and principals the opportunity to develop their leadership, management and training skills. Their work in Africa typically involves acting as coaches and mentors to African teachers and principals in areas such as literacy, school administration and school development planning.

LCD's Link Schools Programme is designed to foster mutual learning between Irish/UK and African schools. It aims to transform pupils and teachers alike into global citizens who have a clear understanding of issues of global concern. In addition to providing schools with a Link Schools Pack and facilitating correspondence between linked schools, LCD also organises activities each year for schools on the programme and provides ongoing support to linked schools. Schools can join the programme whether or not they are involved in the GTP. In addition to enabling schools to learn about each other and gain a greater global awareness, LSP also enables Irish and UK schools to assist LCD with school improvement work in Africa in a variety of ways.

From educational development to development education

LSP and GTP take place in the context of LCD's school improvement work. For LCD the starting point is not development education but school improvement in Africa. However we recognise that our work with schools in Africa provides us with a platform for development education activities and with a way of integrating educational development in Africa with development education in the global North. Since our priority is school improvement in Africa, we seek to ensure that LSP and GTP support this work.

Our interventions in African countries not only provide a framework for LSP and GTP, they inform the activities which take place in both programmes. Our key competency is capacity building and our capacity-building interventions are informed by SPR which identifies needs at school level and informs local school development planning. It also informs a broader analysis of common problems facing many African schools such as the need for improvement in school management, community involvement in school support, improved teaching methodologies in the areas of literacy and numeracy and for initiatives to address the impact of HIV in schools.

We structure both LSP and GTP so that they can help, rather than hinder, our programme teams in Africa trying to address these issues. Global

Teachers are not filling a gap in classrooms but working with schools and LCD in Africa on issues identified through the SPR monitoring and evaluation framework. Thus teachers from Ireland and the UK mentor and workshop with local teachers on literacy, school administration, school development planning or other relevant issues, while gaining a greater understanding of Africa and development issues. When they return home, under the mentorship of LCD in Ireland, they use this experience to bring development education alive for children in their own classrooms, in addition to sharing their experience with a broader audience within the education sector.

Similarly LSP activities arise out of SPR and are designed and structured to address the different needs of schools in the northern and southern hemispheres. Obviously development education is often a priority for Irish and UK schools and a school link is a valuable tool for learning about development and global awareness. But correspondence between the schools enables them to learn about each other while also providing valuable english-writing experience for African learners, which we know through SPR, is a priority for many African schools. Other events are similarly designed to address the educational needs of the African school, while at the same time raising awareness of issues of justice and equality in Irish and UK schools.

Irish and UK schools are charged a fee for their participation in LSP, and a portion of this money is used to provide limited funding to African schools to address funding gaps in their school development plan, which will have been developed out of SPR. Irish schools are in effect supporting their African counterparts by implementing locally developed plans. Moreover, should an Irish or UK school decide to undertake additional fundraising, this is managed by means of a special project, whereby the funds are used to address a need which has been identified by the African school through SPR and its school development plan.

Conclusion

LCD's primary focus is school improvement in developing countries. While we recognise the importance and value of development education, LSP and GTP have broader ambitions. LSP and GTP are about development education *and* development, about engaging Irish and UK schools and teachers as partners in school improvement in Africa. For LCD, the most important measure of the success of LSP and GTP is the extent to which they

add value to our school improvement programmes. Ultimately we feel that LSP and GTP benefit from being embedded in our educational development work, and their quality in terms of development education is enhanced as a result.

Cathal O’Keeffe is Programme Director of Link Community Development, Ireland.

THE CHALLENGE OF CLIMATE CHANGE

David Thomas

On 14 July 2007, ten campaigners from the United Kingdom (UK) and Ireland were joined on Christian Aid's Cut the Carbon march by Mohammed from Kenya, Rosalia from El Salvador, Geanis and Cassia from Brazil, Risolat from Tajikistan, Mahesh from India, Geoff from South Africa, Dwijen from Bangladesh, Demo from the Philippines and Chirhalwirwa from Democratic Republic of Congo. They set sail from Bangor Marina, Northern Ireland, and completed a 1,000 mile march, which ended with a rally in London on 2 October 2007. Their message was simple: climate change is real, it is caused by human activity and we must take urgent action to stop it. Teaming UK and Irish marchers with those from nations in the global South ensured that the voices of those most affected by climate change could be heard. Whilst it is the wealthy who, through their carbon-fuelled lifestyles, contribute most to the process of global warming, it is the poor who most directly suffer from its effects, as we have seen from those affected recently by increased flooding in Bangladesh, typhoons in the Philippines and droughts in Kenya.

I have had the opportunity to witness the effects of climate change when I visited three of Christian Aid's partners in the Philippines in February 2007, one of which was the Social Action Centre in Infanta. The organisation was still responding to a mudslide that engulfed the town of Infanta in 2004. The disaster had been caused by a number of factors including the deforestation of large areas of woodland in the neighbouring Sierra Madre Mountains and the typhoon and associated rainfall that triggered the mudslide. The Philippines is subjected to an average of 20 typhoons each year and climate change is likely to increase that number as it warms the oceans surrounding the islands. On returning to Belfast, I realised that if more people reduced their energy consumption by, for example, turning off their television sets rather than leaving them on standby, then people in the Philippines would be less likely to have to combat the effects of a typhoon. However, one of the problems confronted by climate change campaigners is how to communicate this fact to the young people who have the capacity to make a change.

As a development educator I regularly speak to young people by visiting primary and secondary schools, universities and, in more informal youth settings, church-based youth groups. My challenge is to communicate the issue of climate change (and other development issues) to groups in an engaging way that will allow them to understand what it is, how it works, its impact on people and how we can act to address this problem.

Climate change is a difficult subject for a number of reasons. First, there are some complex and scientific concepts underpinning an understanding of climate change which can present difficulties when speaking to primary school children. However, I have found that in primary schools the children can suggest lots of ways of cutting their carbon emissions, although they may not be able to connect these proposals to the science of climate change or understand why their recommendations could be effective. However, is it really necessary that children understand the science of climate change? Children of all ages understand the concepts of justice and morality and can grasp that when the people least responsible for a problem are those most negatively affected, as is the case in climate change, then positive social change is needed. Focusing on stories of individuals who have witnessed changing climatic patterns and their effect on livelihoods and traditional ways of life is the most effective means of communicating the injustice of climate change.

A second factor than can make climate change a difficult topic to communicate is the fact that it challenges people personally. It is more comfortable to discuss the debt problem of developing countries because we can hold governments and the World Bank responsible. When discussing trade justice, we can hold the World Trade Organisation (WTO) responsible. However, when discussing climate change the uncomfortable reality is that everyone is individually responsible. While governments and big business must take action on this issue, we also need to consider our own carbon footprints and how to adjust our lifestyles to reduce carbon emissions. As a culture, we have become over-reliant on carbon-based fuels to the detriment of the planet and its capacity to sustain future generations without significant life-style changes. However, I believe that today's generation would be willing to take steps toward positive change given a deeper understanding of the causes of climate change and the actions they can take to make a difference. Development education can play a pivotal role in this process of change with its capacity to enhance awareness of the human cost of climate change, particularly in developing countries, and convince the public that action is necessary whether or not it is difficult or inconvenient.

A third factor that makes this issue difficult to address through education is the sense of defeatism that sometimes surrounds climate change. Some commentators on the issue suggest that the global warming has gone too far or that the actions of well-meaning individuals are ineffective when set alongside the carbon emissions of leading industrialised economies like the United States of America (USA). Moreover, the emissions from rapidly expanding economies like India and China will exacerbate the climate change problem as they continue to develop and become more competitive on the world market. However, development education challenges the paralysis

and negativity that surrounds this view of human agency and provides learners with the conceptual space to raise questions and to critically analyse this defeatist viewpoint that is often generated by sources in the print and television media. Rather than ignoring the issue on the basis of inactivity on the part of nation states, we need to galvanise public support for climate change campaigns that will make the case for political, economic and individual action irrefutable.

Despite the difficulties encountered in communicating the importance of climate change there are also opportunities to be gained from exploring this issue. From a development education point of view the issue is one that clearly demonstrates the interconnectedness of the world. Globalisation is not a modern phenomenon when it comes to the global climate or atmospheric gases, neither of which is bound by state borders. The carbon emissions of each individual in each country collectively have a global impact on climate change through which we are all connected and all have a responsibility to one another. Climate change arguably demonstrates this link better than any other topic and the issue of personal responsibility can be an empowering factor that persuades us to act for the benefit of others. In respect to other campaigns, a young person may well feel that their actions will not make a difference because politicians are less likely to listen to them. However, anyone can make a difference in respect to climate change, albeit one of many drops in the ocean, by cutting their own carbon emissions. This provides young people with an opportunity to do something positive by taking action themselves rather than trying to effect change indirectly through, for example, letter-writing or postcard campaigns.

Regardless of the challenges and opportunities presented by climate change, it is an issue that must be engaged with by those involved in development education. In the words of Nazmul Chowdry from Practical Action in Bangladesh you can 'Forget about making poverty history...climate change will make poverty permanent'. Those of us involved in education have an important role to play in convincing a generation to confront the most important issue of our time.

David Thomas studied to be a science teacher and spent two years working with the education team at the Science Discovery Centre in Belfast. Since 2005 he has been the Youth & Schools Officer for Christian Aid Ireland, working with teachers and youth workers to promote development education. He is also Christian Aid's representative on the Climate Change Coalition in Northern Ireland.

EDUCATION FOR SUSTAINABLE DEVELOPMENT

— *FEELING OUR WAY*

Pete Mullineaux

Introduction

This article draws upon my experience in schools as a drama and creative writing facilitator, working around development themes and issues. While all education is developmental and should be a vehicle for empowerment, my focus here is on empathy: the integration of *feeling* with thinking – a vital component in the learning process, which I suggest is largely ignored within mainstream education. I believe that more attention to ‘emotional energy’ is central to our understanding of empowerment, particularly with regard to gender factors in learning and socialisation, and can also make a vital contribution to sustainable development.

Information overload

While learning should never be about knowledge for its own sake, in many ways we *have* become overloaded with information – competing from Junior Certificate onwards to own the world through knowledge acquisition – tirelessly trying to keep ahead of the rest. But what are we thinking and *feeling* when we do this? ‘Isn’t it all a bit depressing?’ one pupil challenged me, at the start of an eight week Poetry Ireland ‘Development Education through Literature’ project. We were looking at the theme of child labour and this pupil was saying how she *felt*. Yes, the fact that 300 million children are forced by extreme poverty to work from a young age, many of them in the most appalling conditions, *is* depressing. There is always a danger that simply depositing what we know on learners can produce a numbing effect, unless it offers the possibility of empowerment within a process for change.

Empathy to empowerment

The process for empowerment firstly involves moving beyond mere sympathy (simply feeling sorry for someone or something), which is a passive emotional reaction in which distance is maintained, towards the complexity of empathy: embodying active engagement and forging relationships. For

example, writing a poem or taking part in a dramatic role-play, allows us the possibility of experiential learning that encompasses thinking and feeling from the perspective of others. In doing so, we also open ourselves up and become aware of our own thoughts and feelings. By learning to empathise and channel our anger at the injustices of the world through practical actions such as writing letters, organising petitions, putting on plays or writing poems, we can experience a more meaningful level of empowerment with positive outcomes. Therefore, within this process of acting to change our world, *we* change too as social activists.

Sewing seeds

I became familiar with the justice and human rights organisation Action from Ireland (Afri) through my connection with the Louisburgh Community Project in County Mayo, where I had worked in local primary schools devising drama presentations for the annual Famine Walk which commemorates the Irish famine of the 1840s. My previous work with Louisburgh involved examining famine-related themes such as displacement and global justice. In a new project with Transition Year girls from Loreto School, Crumlin, (Dublin) I worked on issues surrounding the ownership and patenting of seeds. These were issues which I knew very little about until witnessing class inputs from development education expert, Clare O’Grady Walshe, who spoke about biotech transnational corporation (TNC) Monsanto and its activities in genetic modification, the harassment of farmers and other unethical practises including seed-piracy. She told us about protecting seed banks in Iraq and Rwanda from destruction during war and genocide and, whilst I was fascinated by her contributions, I wondered if these young students *felt* the same way? I was concerned they might accept the worthiness of the project but at the same time be overwhelmed by so much information and become distanced, even dispassionate about the issues. Even when I mentioned ‘seeds’ as an issue to adults eyes often tended to glaze over.

The drama process

In our first classroom session I took a broad approach and asked the students to show scenes of people protesting against any issue of their choosing and those selected included preserving the rainforest and women’s rights. Recalling Clare’s impassioned introduction we talked about what makes someone *care* enough to get involved with an issue.

The students were then invited to invent a character that they could

portray and identify with while engaging with sustainable development. The class created a teenager called 'John' who was environmentally active in protecting seabirds and also wrote songs in his attic. I thought it was intriguing that in an all girl group they opted to create a male role model. Were they attempting to distance themselves from the issues, or did it signify a lack of self-worth? Or did it simply add a bit of spice for them to bring a boy into the frame? This was an issue I aimed to pursue and resolved to incorporate this element at some point in our project.

'Jackie and her Beanstalk'

The students depicted John arguing with his parents, walking on the beach, talking to himself and picking up a lifeless seabird covered in oil. They allowed him to be a complex and contrary character but wanted to know what made this person an activist. We looked at earlier moments of influence, including childhood stories. In revising one fairy story, as '*Jackie and her Beanstalk*,' our protagonist finally turned back into a girl. It also gave us a running metaphor, a gender sub-theme and the title of our dramatic presentation. Since its premiere at Afri's Féile Brid conference in Kildare the script has also been performed by a different group of teenagers connected with Scariff Seedsavers in County Clare, as part of the 'Our Fragile Earth' Mountshannon Arts Festival.

Emotional energy

During this project it was clear that the participants were *emotionally* as well as intellectually engaged with the issues raised and delivered. Emotions such as 'caring' had become a major component of the learning experience and more challenging feelings, such as anger, were also acknowledged and used to positive effect. One of our role-plays involved rescuing oil-covered seabirds on a beach. Afterwards, I asked the students for feedback on the exercise and they shared emotions such as 'anger', 'guilt', 'frustration' 'sadness' and 'anxiousness.' The students talked openly about feelings, but from a safe distance, and crucially, in an atmosphere of trust where all contributions were accepted and validated.

Teaching how to utilise, rather than deny, emotional energy was also important when I worked with children in Galway on a 'Power Within' suicide prevention programme. Again, the emphasis on emotions was not simply to promote an articulation of feeling, as some sort of therapy, but rather to share and acknowledge these feelings and then *think* about them.

‘Know yourself – know the world’

Another Louisburgh Community Project, for the Sonas Arts Festival in 2004, was hugely rewarding. I worked in three primary schools, this time in tandem with Tom Meskell, a visual arts facilitator. We started with the following sci-fi premise: a computer virus had done the impossible – escaped into the human body - and the children in role-play as a team of ‘micronauts’ had to enter the bloodstream and find the virus. Their mission was to deactivate the virus before the human race was literally shut down! In entering the body, they discovered other things – overloaded brains, broken hearts, empty or bloated stomachs. They also *became* these organs and discovered how each *felt*, whilst giving each one a voice and visual representation. This exploration provoked some enlightened thinking and discussion, with, for example, the ‘stomach’ group and one 4th class child, talking about obesity and saying that we sometimes stuff our stomachs to hide our feelings. I was struck by the level of awareness of such a young student! On a gender note, one teacher, whose class was playing ‘the heart’, observed her boys and girls mixing for the first time and how the boys in particular, who had initially been obsessed with violent images and the portrayal of anger, were now at ease with a wider range of feelings.

Conclusion: rich or poor?

Ireland is a comparatively wealthy country, and yet in spiritual terms we are arguably still impoverished, given the levels of greed, isolation, and competitiveness as well as general stress that attends such a materialistic society. Despite our wealth in global terms, we still feel envious towards those viewed as wealthier because of their material possessions and we are consequently driven to attempt acquisition of all those superficial accessories. Meanwhile, within the workplace or in school, we largely ignore these feelings, numbing ourselves in order to become vessels for a never-ending supply of information; often digesting it all with difficulty. I have worked on several educational projects that reflect this situation. Primary pupils tend to be more imaginative, open, articulate and unafraid of themselves or each other. However, by the time they get to the third year of secondary school, they can be terrified of making a mistake, uncertain of themselves, gender shy and wary of exposing their imaginations to criticism. A quantity of knowledge may have been acquired but at a qualitative cost to both feelings and sense of empowerment.

Pete Mullineaux lives and works in Galway, Ireland. He has facilitated drama and creative writing projects in schools and other contexts for many years, specialising in devising work around development issues. He has recently devised a drama presentation with secondary school students, on the theme ‘Children in Crossfire’ for Afri’s Feile Bride Conference in Kildare, Jan 26th 2008. Pete has written several plays for the stage and RTE radio, recorded his songs and published a short poetry collection – *Zen Traffic Lights* (Belfast Lapwing, 2005.) He is also the author of two educational books: *Know Yourself – Know the World* (email: info@learninghorizons.ie) and *A Piece of the Cake* (email: petemullineaux@gmail.com).

Viewpoint

‘ITS LIFE JIM – BUT NOT AS WE KNOW IT’: THE UNIQUE CONTRIBUTION OF DEVELOPMENT EDUCATION TO ‘BIG PICTURE’ SUSTAINABILITY EDUCATION WITH A FOCUS ON CLIMATE CHANGE

Dr. Jenneth Parker

This article starts from the assumption that a key aspect of sustainability is that it requires us to connect different aspects of our lives and of our world that are often separated. Sustainability thus poses a key challenge of situating areas of knowledge and concern in the bigger sustainability picture. This piece begins to re-conceptualise development education (DE) in the context of connective sustainability and aims to tackle the following questions:

- How can we conceptualise ‘Big Picture Sustainability’?
- What does DE do best and where does it fit in Big Picture?
- Could thinking about Big Picture sustainability and education for sustainability (EfS) indicate new directions for DE?
- How can DE contribute to meeting the challenge of climate change?
- Does the holistic nature of sustainability mean that everyone has to do everything?

Knowledge pathology and ecology

Our current view of life tends to separate important aspects of the world from each other according to perceived importance and categorisation. This is a kind of knowledge pathology from the sustainability perspective. This fragmented worldview generates a pathology not just of misunderstanding but also of identity. If, as holism suggests, the whole is more than the sum of its parts, then to focus only on its constituent parts rather than on their relation to the whole organism is to lose vital knowledge. This point has been heavily emphasised by those thinkers in sustainability and EfS who

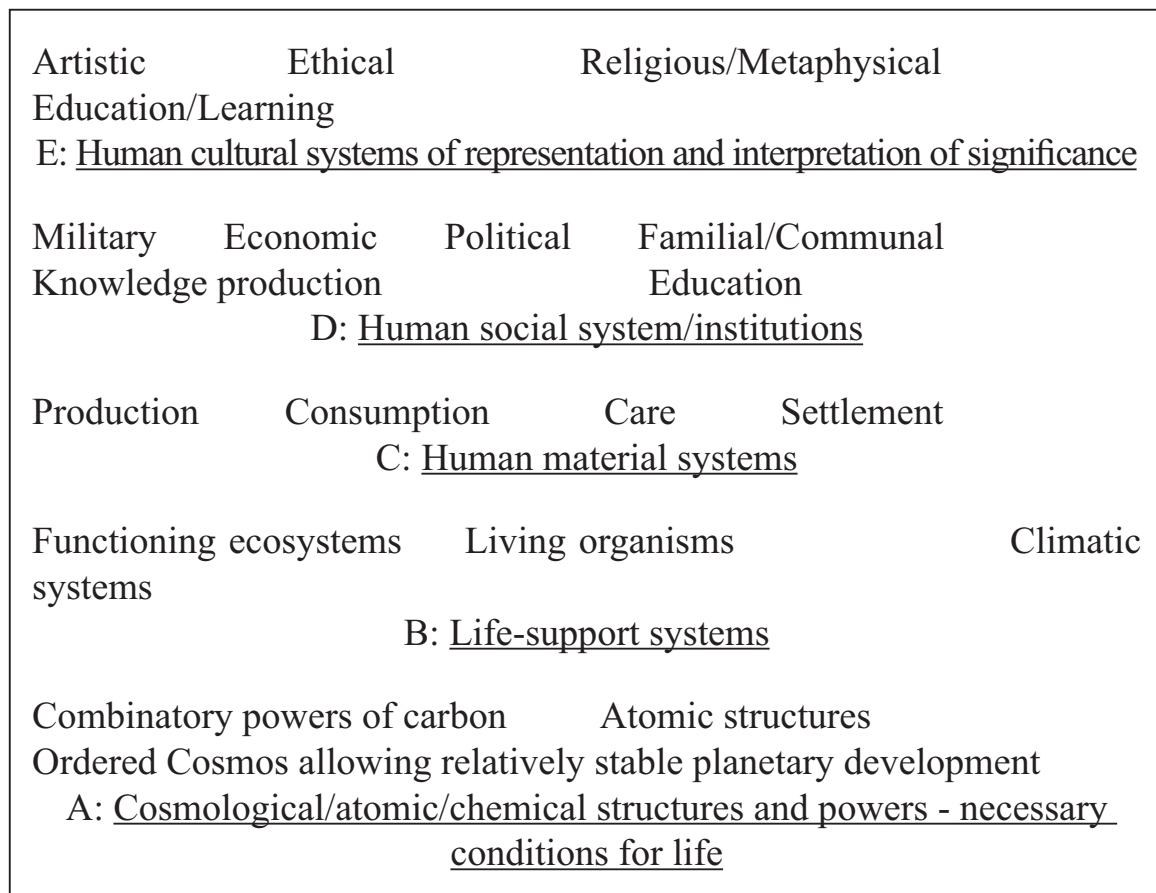
stress the contribution of ecology to joined-up thinking. Indeed, to abstract living beings from the ecological networks of life which both sustain and utilise their life-cycles is to lose vital knowledge about their reality.

There is a lot of debate about whether and to what extent this view is ‘ours’ – or just who is ‘us’ in this context. Some people argue that the compartmentalised system of ‘modern’ knowledge is a relatively recent cultural phenomenon and mostly adhered to by elites. Others also propose a gender difference to ‘our’ views of life. In addition, local and indigenous knowledge has begun to be recognised as an important addition to expert knowledge in helping to produce more sustainable solutions.

Big Picture sustainability

The diagram below was taken from ‘Situating EfS’, a chapter I authored for the forthcoming book *Journeys Around Education for Sustainability*, which contains a collection of edited work from the London South Bank’s Education for Sustainability (EfS) international distance learning Masters’ Programme. It aims to provide one way in which we can conceptualise Big Picture sustainability.

Fig. 1 Framework approach to understanding connective sustainability



A: Necessary conditions for life: cosmological/atomic/chemical domain – the relatively stable cosmological, atomic and chemical structures and powers form the basis for the development of life and the context within which the evolution of life has occurred.

B: Life support systems/ecological domain – this forms the material and ecological base of all life; human life forms a part of this, but also increasingly impacts upon it.

C: Human material systems/social-ecological domain – human groups use ecological resources, thereby impacting directly on the ecological domain (B).

D: Human social systems/social-institutional domain – these organisational forms contribute to shaping material practices at C and thus condition the impact of B on A.

E: Human cultural systems/cultural domain – helps people make sense of the world; provides value-loaded images of the world; impacts on C and B.

Development education is faced with the challenge of situating itself within, across, or between the systems represented in this diagram, and deciding which systems it can best influence on both local and global levels.

The development education prescription for the knowledge pathology

The separation of things is not just a problem from an ecological perspective. Critics of individualist cultures of social identity and consumerism have also noted that to separate out human individuals from their relationships to other humans is also to lose vital knowledge that may have great practical and ethical importance. If we do not know the connections between consumption of cheap imports and overseas gross labour exploitation this is a failure of knowledge about ourselves and the kinds of social and economic relations to which we (unwittingly) contribute. Development education in its many different forms claims that to separate out the economic effects (in monetary terms) from their related effects on social justice, human well-being and rights is also to lose vital information. To be unable to make these connections prevents us from understanding the causal relationships between things and hence diminishes our capacity to find solutions.

Maybe this knowledge pathology also prevents us from knowing ourselves in some important moral ways. Are we part of the problem or part of the solution? Are we careless parasites on the suffering of others, or just powerless individuals in the grip of a juggernaut system that is denying us

moral agency? DE raises these vital issues by attempting to increase our awareness of these connections.

Because we live in a compartmentalised culture it is generally easier to deny problematic causal relationships on a daily basis. DE therefore has an important role in raising these connections between our economic, social, cultural and ecological life on this planet. To be aware of these connections and not recognise their moral significance is another kind of failure, although one based on choice. This may emanate from a sense of disempowerment arising from the conviction that we are too deeply implicated in an unjust society to contribute to meaningful change. It is important that DE promotes the joy and liberation of living in a more joined-up and ethical manner through positive examples such as fair-trade purchasing or cross-cultural dialogue and solidarity. DE could contribute more by way of showcasing cultural alternatives and engaging in debates on sustainable livelihoods.

The contribution of development education

This diagram utilises the framework approach to begin to analyse the contribution of DE to Big Picture sustainability.

Fig. 2 Analysing the contribution of development education to Big Picture sustainability

DE can explore ethical, cultural and identity aspects of joined-up living.

E: Human cultural systems of representation and interpretation of significance

DE can investigate, expose and disseminate information about social and human rights and the effects of economic and military institutions and social power relations; it can also investigate and disseminate information about alternatives; develop liberating and democratising pedagogies that also address key issues of people's lives.

D: Human social system/institutions

DE can investigate the material impacts of production systems on the health of workers; investigate and disseminate information on healthcare and health issues of gender and power systems.

C: Human material systems

A connective DE might investigate and disseminate information about the links between poverty and decline in life support systems.

B: Life-support systems

A connective DE might consider the possibility that the conditions for life could be disrupted by nuclear radiation.

A: Cosmological/atomic/chemical structures and powers
- necessary conditions for life

Joined-up change: the example of climate change

A key point to sustainability is that it necessarily focuses us on joined-up **change**. In terms of ecological sustainability the complex material and social factors that are contributing to climate change are being measured and studied including, importantly, predictions of likely effects on ecosystems and life-support systems. However, the economic, social, cultural and human consequences of climate change are currently receiving much less attention. In the field of economics we have had the Stern Review on the Economics of Climate Change in 2006 look at the implications of climate change for increasing poverty. The review estimates that without significant financial investment to avoid the worsening effects of climate change, a 20% reduction of life-support capacity for the planet can be expected in the future, which makes grim reading for the poor and affluent alike.

Some development organisations are presently making strong contributions to the cultural and ethical interpretation of climate change as a key global justice issue such as the recent Oxfam climate justice awareness-raising campaign. It is important that development education step up these efforts and determine how it can contribute to a sustainability-based analysis of climate change and advocate for positive change across its characteristic domains. What could and should be the unique contribution of DE to the increasingly voiced concern about the multi-dimensional threat of climate change? What opportunities does the greater profile and certainty about climate change present for DE in terms of influence and development?

Conclusion and implications for practice

Faced by the global crisis of sustainability, of which climate change is a key part, all areas of study are encouraged to review their capacity for joined-up analysis and propositional thinking in order to make their appropriate contributions to: reduction of human impact on local and global ecologies; mitigation of current effects; and political, social and economic adaptation to predicted future conditions. DE has a lot to offer sustainability and it is crucial that these contributions continue to be made. Moreover, sustainability provides overwhelming support for the need for greater social justice, and forms of ethical development and ecological understanding that are necessary for better project analysis and planning.

NGOs of all kinds are faced with demands for joined-up practice from funders and also from the logic of our joined-up world. Environmental NGOs like the World Wildlife Fund are now taking on human development aspects, and development NGOs like Oxfam are now taking on environmental aspects to their work. Like big players in the corporate sector, large NGOs with interdisciplinary capacity may be squeezing out smaller organisations. The latter may need to enter partnership coalitions to address sustainability, but all areas of practice should examine their partnership needs in the light of connective sustainability.

The challenge of sustainability raises questions of our capacity for social learning, both within our own organisations and through partnerships and coalitions with other NGOs. Thus connective sustainability should not mean abandoning areas of expertise but re-conceptualising our fields through ongoing links with other sectors and areas of education. Can we embrace this as a learning opportunity?

Dr. Jenneth Parker's background is in philosophy, feminist and environmental activism, and adult and community educations. She has been learning and teaching about sustainability issues since 1992. She worked for nine years as Co-Director of the Distance Learning Masters Programme on Education for Sustainability at London South Bank University. She is currently researching Leadership for Change in Higher Education at Bristol University, writing on climate change and sustainability and would be interested to hear from anyone who would like to engage in further discussion of the issues raised above.

Reviews

Experiences of Childhood

Reviewed by Mervyn Hall

In January 2007 I attended a seminar in Enniskillen, County Fermanagh, facilitated by Michael Brown, the Director of Development Media Workshop (DMW). What originally attracted me to this event was its focus on child labour in the Third World. I was told that there were filmed examples of child labour, as well as supplementary educational material. As Citizenship Coordinator for my school, I had already identified key areas from my citizenship teaching that required attention. These included the need for fresh educational material on Third World poverty, which would enhance the Citizenship teaching to our Year 9 groups (12 to 13 year olds). I also felt that more contact was required with outside agencies, such as DMW.

Michael Brown's presentation and suggested classroom materials immediately won me over and I agreed to pilot his work. Working within Mr Brown's time limit I decided to create three new lessons based on his work and to incorporate these lessons into my existing Year 9 Citizenship programme. In total I was to spend five lessons on child labour and poverty in the Third World which included one of DMW's films on child labour. The aims of these sessions were to capture the spirit of DMW's work and, at the same time, inform students about Third World poverty and the wider concept of rights of the child.

Experiences of Childhood is an attractive and robust teaching package, which is clearly laid out and is divided into five progressive content themes:

- What is childhood?
- What are Child Rights?
- Child Stories
- Why, and how, are children denied their rights?
- How can children's rights be protected?

A matrix is provided at the beginning of the resource which outlines the pack's theme, content, suggested activities, and the resources provided. This is complemented by a curriculum rationale within the core area of local and global citizenship which is one of three strands contained in Learning for

Life and Work as part of the Northern Ireland post-primary curriculum.

The teaching notes contained within the pack are clearly set out with headings, bullet-pointed sub-headings, as well as a description of the activities contained within the resource. Recommended lesson times and methods for teaching the various activities are provided in addition to summary points at the end of the activities. The notes and activities are complemented with colour photographs, including website pages, examples of children's work and teaching exemplars. A DVD of four childhood films and a CD containing teaching materials is also included comprising a visibly superior teaching aid.

In piloting the resource, I was fortunate to have an existing one hour teaching time slot per week for half the school year. This afforded good quality contact time with students enabling effective and wide-ranging active learning to take place. The lessons in the teaching resource are allotted between 35 and 45 minutes although the structure of the resource activities allows for teachers to be flexible and adapt the materials, activities and timeframes to meet their own needs.

My first session equated with Section One of the resource on 'What is childhood?' This lesson was well-received by my Year 9 group as it involved them in group work and feedback. It asked the students to analyse their own childhood and to draft a general definition of childhood, both tasks requiring a degree of introspection. The pack's second activity on exploring childhood invites students in groups to draw a picture of a child and place his or her 'physical, emotional and social' needs around the illustration. It is a fun activity but also forces students to focus on the basic rights of children. Weaker students may need support with some of the terminology in this activity.

Section Two is titled 'What are Child's Rights?' and addresses more closely this fundamentally important issue while complementing the work completed under Section One. The activity in Section Two represents a valiant attempt to make what can be quite a dry topic into an enjoyable experience for students. The activity engages students in decision-making exercises on the basis of statements drawn from the UN Convention on the Rights of the Child.

Section Three on 'Childhood Stories' is undoubtedly the strongest aspect of the resource. The students watched spellbound the film on Meera, a 15 year old Nepalese student who earns a pittance working alongside her parents breaking stones with a small hammer in a quarry. The film's sparse narration does not distract the viewer from Meera's story which shows her combining her workload with attendance at a school with very limited facilities. The issues arising from the ensuing classroom discussion were wide-ranging and included Meera's lack of rights, her work conditions,

and the contrast between her rights and ours. Section Four examines how children are denied their rights through the example of a civil war scenario. This particular lesson may be more appropriate for an older age group, perhaps at Key Stage 4.

Section Five examines how children's rights can be protected, looking particularly at the targets set out in the United Nations' Millennium Declaration. The lesson again encourages discussion through group work and asks the pupils 'to consider how achieving the Millennium Development Goals will help to protect Child's Rights'. The pack ends in an uplifting note with the DVD showing how Meera's life has changed for the better.

Experiences of Childhood is an excellent teaching aid that fully complements and dovetails neatly into the existing local and global Citizenship curriculum. Its strengths lie both in the real life examples of child labour shown in the DVDs, as well as the breadth of teaching suggestions and activities included. The pack allows for flexibility that permits many of its lessons to be taught to a wide ability age range.

For the teacher the resource is neat, succinct and self-contained with resources that can be easily printed from a CD. Recommended websites are provided that could enable students to carry out research and project work with the support of the teacher. The subject matter also supports cross-curricular work encompassing subject areas such as geography given the resource's focus on developing countries such as Kenya and Nepal. Development Media Workshop has provided teachers with a resource that is fresh, original, thought-provoking and workable. I strongly commend this resource.

Experiences of Childhood can be purchased for £10 per pack, to include packaging and posting. Please send cheques to: Development Media Workshop, Fermanagh House, Broad Meadow Place, Enniskillen, BT74 7HR, N. Ireland. For further information, please contact: info@developmentmediaworkshop.org.

Experiences of Childhood (2007) Development Media Workshop, Enniskillen.

Mervyn Hall is Head of History and Coordinator for Learning for Life and Work at Collegiate Grammar School, Enniskillen. He has been teaching for over twenty years and has taken citizenship training. He implemented citizenship into his school at an early stage of its development and has represented his school at education events in Britain, Ireland and the USA.

An Inconvenient Truth

Reviewed by Jenna Coriddi

“There are good people....who hold this at arm’s length because if they acknowledge it and recognize it then the moral imperative to make big changes is inescapable” (Gore, 2006).

This documentary film about global warming was inspired by the campaigning work of Al Gore, the former United States Vice President, to raise awareness of the issue and encourage action against climate change. The film premiered at the Sundance Film Festival in Sundance, Utah in 2006, and has since won an Academy Award and become the fourth highest grossing documentary of all time. The content of the film largely derives from lectures delivered by Gore at a number of universities and schools around the world. The presentation includes impressive visual supports which demonstrate the level of climate change already wrought from our consumption of carbon. He details the elements of the modern environmental movement and traces the development of his interest and involvement in climate change from his university days onward. The film’s title alludes to the hesitancy of politicians and governments to address climate change because of the tough and potentially unpopular actions that are required to tackle the issue, the financial cost of changing to less environmentally damaging energy sources, and the need to alter our lifestyles and means of production. Gore details some of the elaborate and underhanded efforts by United States government officials to hide the truth about global warming from the American people.

The film is accessible and communicates the science of global warming in a manner that is understandable even for those without a scientific background. Gore explains the basics of how the earth’s temperatures are kept constant, but how human interaction with the natural environment since the Industrial Revolution has caused carbon dioxide (CO₂) levels to rise and with it the planet’s average temperature. He also illustrates how warmer temperatures cause the melting of glaciers, which in turn affect the salt levels in the sea, increase ocean temperatures, affect currents and strengthen storms.

While understanding the science is important, it is often easy to disregard the direct impact that these incremental changes are having on a daily basis. The film does an excellent job of addressing how the effects of global warming have affected millions of lives around the world: deaths due to extreme heat waves, homelessness due to flooding, and the more regular occurrences of drought, mudslides, hurricanes and typhoons. Gore also outlines the impact of minute daily temperature rises on ecological cycles

such as birds that starve because caterpillars hatch early and forests that are destroyed by extended feeding periods of pine beetles. Most frighteningly, the film points to a catastrophic future for the planet, its ecology and inhabitants unless immediate action is taken. The viewer is horrified by scientifically calculated images of China, San Francisco and Manhattan, all partially submerged by rising sea levels which will result from rapidly melting glaciers, and by a computer-generated image of a polar bear, swimming miles in search of ice on which to rest.

The film intersperses the lecture with personal and professional reflections from Gore that include a family history in the tobacco industry, family loss, bereavement and a high profile career in politics. Gore frequently revisits his controversial loss of the US Presidency in 2000, including in the film a short montage of images from the disastrous Florida election which first gave Gore the presidency and then took it away. While his reflections are meant to illustrate his personal motivation to educate about climate change, the bitter political undertone does detract from what the film is supposed to be about: global warming. Students who are unaware of American politics could also become confused about what happened in the 2000 elections and the pertinence of these segments to the film as a whole.

The film closes on an optimistic tone that suggests that there does not need to be a choice between the economy and the environment. Humanity has the technological and scientific knowledge to address the problem, and what is needed is the determination and public will to change our life-styles and consumption patterns. The closing credits are used to highlight small but effective actions that viewers can take to make a difference: walk, ride your bike, use green energy, plant trees, vote, drive a hybrid, *learn*, and put that knowledge into action. Some development educators may argue that the film does not go far enough in proposing actions that will support good educational practice. It could be described as disempowering in the sense of highlighting the enormity of the problem but not responding with the required radical actions needed to address it. Conversely, global warming sceptics say that the film was exaggerated and that the effects will not be nearly as drastic as portrayed. Animal rights activists questioned the omission of findings from the United Nations *Livestock's Long Shadow* report, which stated that 65% of human-related nitrous oxide comes from the world's livestock industry, more than from transport (Steinfeld, Gerber, Wassenaar, Castel, Rosales & de Hann, 2006:114).

These criticisms do not appear to have slowed down the educational impact of this film. In fact, it has begun to be integrated into several colleges and high schools as part of the mandatory curriculum. It was added to the science curriculum for fourth- and sixth-year students in Scotland

and has been made available to schools in Spain as well. As part of the Sustainable Schools Year of Action to promote sustainable development and environmental awareness, copies of the film were distributed to secondary schools in Scotland, Wales and England despite legal battles over factual accuracy in parts of the film and schools' responsibility to present an approved opposing view.

An Inconvenient Truth has played a significant role in raising public awareness of climate change to a new level and has been a significant educational tool in upper post-primary schools and at third level. Al Gore's recent Nobel Peace Prize for his campaigning work on climate change will add weight to the message of his film which, despite shortcomings, represents an important starting point in engaging the public with the issue of global warming.

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Bamako

Reviewed by Jonathan Penson

A shot rings out across a dusty wasteland. The shot ends a wasted life. The driver of a luxury car passing by hears the bang, halts his car, and checks his tyres, so oblivious is he of the desolation of his surroundings and so protective is he of his acquisition.

A Malian bride gasps for breath as she is trussed into an ill-fitting, white lace bridal gown, as she sits beneath a Tannoy relaying an impassioned voice bemoaning the crushing of the Negro by the white world economy.

The words of a young man relating the loss of his journeymen as they crossed the Sahara to enter Europe are interspersed with the blood-red run-off from newly dyed sheets spiralling down a drain.

These are the images which remain with you from *Bamako*, a new film by the Mauritanian director Abderrahmane Sissako. The film is set almost entirely in a typical Malian courtyard – the same courtyard where Sissako grew up. In the yard people come and go, fetch water, celebrate a wedding, chat, argue, children play. In the rooms on its fringes, a couple are breaking up; a man is dying; a child lies ill with fever; a woman chats on her mobile with her mother. Intermeshed with these tableaux of ordinary Malian life are court proceedings which, despite their extraordinariness, are enmeshed with these lives just like another storyline, treated with the same amount of concern to some and indifference by others. The International Finance Institutions (IFIs) and the Group of Eight leading industrialised countries (G8) are on trial, accused by African society of being the cause of its woe.

Dressed in full regalia, a judge hears evidence against the IFIs from Malian intellectuals, writers, peasants and activists. As one would expect in a courtroom, where the machinations of persuasion frequently eclipse truth, the testimonies are eloquent, passionate and convincing. Yet the arguments are most powerful at the points where language breaks down. A former teacher, his school closed by the World Bank's policies, is rendered literally speechless at the witness stand, his *raison d'être* taken from him by the loss of his vocation. And by far the most powerful moment in the film – of almost any film I have seen – is where Zegué Bamba, an aged chief, half-sings-half-speaks his testimony: a lament for Africa. This extraordinary moment is not subtitled, as the rest of the film is. Instead, one is forced to focus on the emotion, not the words: the grief, the anger, the bitterness, the passion, the love for his homeland, the sense of loss, the resentment. The sense of injustice. It is by far the most eloquent statement on Africa I have heard. It spoke to me as no words could have done. The film is worth seeking out if only for this one moment.

This, then, is a film about the power of images over word. In some senses, the film thus undermines its own conceit. Despite the passion and righteousness of the rhetoric, in the end, convoluted arguments rehearsed in cloistered courtyards, relayed through tinny loudspeakers to an indifferent audience only in the immediate vicinity, are meaningless. The wrangling of Western-style legalese is made irrelevant even at its most relevant. Lives lived out in poverty in the periphery of the courtyard take centre-stage in the moral landscape. As Zegué Bamba says, ‘Words are something that can seize you in your heart. It’s bad if you keep them inside’.

How can this film be used for global education? My first reaction is, with difficulty. The film is long, and paced according to African conventions of narrative, a long way from Hollywood formulas (a distinction cleverly made explicit in the film, by the interjection of a Spaghetti Western style intermission, *Death in Timbuktu*, in which African cowboys kill meaninglessly, catching civilians in the crossfire). I feel the average school-age audience would struggle to engage with the film. Moreover, the courtroom discourse requires a high degree of familiarity with IFI policy, and the sophisticated language comes at you quickly. So I would tend to use extracts from the film as a springboard for other activities. The film’s website (<http://www.bamako-themovie.com/home.html>) has some excellent ideas, and includes Zegué Bamba’s lament (click ‘open testimony click’ at http://www.bamako-themovie.com/fe_05_legal.html). Opening a lesson with this clip, asking students to write down adjectives which describe the testimony and then asking them to speculate on what he is speaking about, would be a powerful introduction to a class project staging its own trial of the IFIs.

Bamako (2006) [Film]. Sissako, A. Paris: Archipel 33.

Jonathan Penson is a Researcher/Consultant with the CfBT Education Trust, where he is currently researching education reform in fragile states. He has previously worked as a teacher and teacher trainer in the UK, Botswana, Nepal and Rwanda. He is on the DfID Global Educators Register. Contact jonathanpenison2000@yahoo.co.uk.

This review was published in issue 5 of *Policy and Practice* and incorrectly attributed to Yvonne Egan. The review was in fact written by Jonathan Penson. The editor extends sincere apologies to Jonathan Penson for this error.

Contributions to Policy and Practice

The Editorial Group invites readers with experience of development education and related areas to contribute:

- suggestions for future themes or Viewpoint topics;
- articles for submission to any section of the journal;
- suggestions for resources of any type to be reviewed;
- letters.

Submissions are welcome from development organisations and activists, academics, formal and non-formal educators, statutory policy-makers in education and development and civil society groups in Ireland, Europe and the Global South.

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Readers have a choice of article to submit from the following types:

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The Guest Editorial is usually 800 -1000 words and allows a personal reflection and comment on the issue's main theme whilst highlighting and linking key points and arguments from the Focus articles. Personal interpretation of the theme and articles in the Editorial is important and this may range from an overview of the issue, to a challenge for readers or a projection for the future.

No editing duties are required.

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