

Teaching and Learning In, With and For Community: Towards a pedagogy for education for sustainable development

Lorna Down, University of the West Indies, Jamaica

'Butterflies go before me down the path and I follow thinking of the giant swallowtail endangered in its Blue Mountain sanctuary.' Earl McKenzie

Abstract

The paper explores how one teaches and learns for sustainable development primarily through analysing education for sustainable development (ESD) initiatives in the Caribbean within the framework of service learning. The paper proposes that a pedagogy for ESD will require positioning education in the centre of community. What that means in terms of content and methodology is the focus of our discussion.

Introduction

'We are more than a beach, we are a country' – so ran an advertisement in Jamaica in the early 1970s, beckoning both tourists and islanders to move beyond the mythic images of the island in tourist brochures to acknowledging the complexity of relations between a place and its people. The failure of Caribbean peoples and visitors to do just that has led to deepening ecological, economic and social problems – a snapshot of what is happening elsewhere on our planet. Those advertisements, an attempt to educate people about the interconnectedness between the environment and socio–economic relationships, were later withdrawn amidst criticism of their negatively impacting the tourist trade, the number–one income generator for most Caribbean countries.

A decade or two later, 'development' in the Caribbean has deepened into crisis. The cost of diminishing resources of energy, water and food is high. Poverty and violence are growing concerns in a number of the islands. There are also other sustainability problems like HIV/AIDS. And of course there is climate change. The Caribbean islands, like many other small islands elsewhere, are particularly vulnerable to these multiple and connected problems.

Witter (2007) explains that Caribbean countries have a production system that has historically been based on the exploitation of labour and the despoliation of the environment. He points also to current export industries like mining and tourism, key economic drivers in the Caribbean, which perpetuate this lack of respect for people and the environment. Moreover, the Caribbean is dependent upon industries such as tourism and agriculture. These all have a

natural resource base. Paying serious attention to this natural resource is, therefore, absolutely crucial. Additionally, Caribbean countries are faced with a high population growth rate and limited economic resources. These have hindered the sustainable development of Caribbean societies. Focused attention on sustainability is thus essential for the survival of these countries.

Development is a complex issue. On one hand, development is equated with a vibrant economy. Yet to attain that vibrancy often means the destruction of place and people. To be truly educated, therefore, for this technologically advanced world, requires that people learn about the dangers of unbridled development. Witter (2007:2) aptly illustrates the need for this kind of education as he describes a people's behaviour:

I often wonder whether the habits of the past that had been beneficial by chance to the natural environment have become harmful because the nature of our garbage has changed. In the past, we threw our coconut husks, mango skins, and yam and banana peelings in the 'bush' where they would disappear into the environment quickly, nurturing the soil and the animals. Today we throw our plastic bottles and other non-biodegradable packaging in the same way, but these pollute the earth, the rivers and the sea as they make their way through the environment.

The call for a radical change in the way we live has thus to be insistent and the power of education to enable such change has been acknowledged by the United Nations as it has identified education as a primary way to achieve sustainable development. The overall goal of the United Nations Decade for Sustainable Development (UNDESD) is to 'integrate the principles, values and practices of sustainable development into all aspects of education and learning. This education effort will encourage change in behaviour that will create a more sustainable future in terms of environmental integrity, economic viability, and a just society for present and future generations' (UNESCO, 2005b:n.p.). It is, therefore, not education as usual.

It will mean a change away from subject-bound teaching, education contained in classroom walls and forms of assessment that require our students to merely regurgitate what has been fed to them. To a great extent, our educated students end up with certificates, diplomas and degrees but our societies remain beset by social and economic injustice, inequities, violence and environmental degradation. The relation of education and society is far more complex than suggested here, but the point is that there is still too wide a distance between what takes place in our institutions of learning and what happens in our society.

Interestingly, Lotz-Sisitka, Lupele and Ogbuigwe (2007), in examining the processes in the design of an ESD course, argue for a new role for African universities, a role that is more socially, environmentally and economically relevant. Quoting Singh, Lotz-Sisitka *et al.* (2007) point out that to do this, to redefine the nature of teaching and community engagement, requires universities to respond broadly to the public good in a manner beyond what is dictated by the market.

To respond to the public good, in other words, to create sustainable communities/societies, is the overarching objective of ESD. What is, however, problematic is the pedagogy needed in our institutions to do this.

This paper argues that to educate effectively for sustainable development a particular kind of pedagogy is needed. Through analysing a range of ESD or ESD-oriented initiatives in the Caribbean, as they broaden the concept of service learning, but also through reflecting on discussions on the concept of ESD, this paper proposes the kind of approach to content and pedagogy that is needed for ESD.

ESD Concept and Service Learning Theories

To identify the pedagogy that is needed for ESD, I begin first of all by examining the concept itself. The concept becomes the basis for determining the kind of teaching/learning approach that is needed.

The foundational definition of ESD is that outlined in the UNDESD International Implementation Scheme (UNESCO, 2005b). Here ESD is seen as being fundamentally about values, with respect at the centre – respect for others, including those of present and future generations, for difference and diversity, for the environment, for the resources of the planet we inhabit. Education is seen as enabling us to understand ourselves and others and our links with the wider natural and social environment, and this understanding serves as a durable basis for building respect. The close relationship between the various aspects of society – the physical, social and economic – is highlighted.

Different societies and different academic settings have interpreted this differently. There has been an emphasis on the environmental aspects in some societies. Peden (2008), for example, raises the issue of the integration of the social, economic and physical as leading to a de-emphasis on the environment. Collins-Figueroa (2008), on the other hand, shows that an emphasis on the environment is a limitation as the socio-political frame in which the environment is located is missing. Sterling (2004) reminds us that environmental problems are not self-contained, but are a critical and integral part of the sustainability imperative which is concerned with the well-being and longevity of interlocking human and natural systems. And Hopkins (2008) stresses that ESD is an integration of concepts of human development, social development, economic development and environmental concerns in a holistic, interdisciplinary way.

The various discussions and debates on defining ESD have helped to clarify the major differences between conventional forms of education and an education focused on sustainability. Some of the discussions – for example, Sterling (2001) – have urged us to focus on the goal of education, on what education is for, and specifically on what is meant about educating *for* sustainability. Others, like Scott and Gough (2004), have highlighted the process of education, thus suggesting a move away from 'the sage on the stage' approach to education. McKeown (2006) moreover, even as she acknowledges that strands and topics on sustainability have always been part of the curriculum, urges that these be woven together to create ESD programmes that are taught overtly.

The philosophy underpinning these discussions is that education should lead to the creation of harmony and balance in our relationship with the environment as well as in our social and economic relationships. The pedagogy needed, therefore, is one that is focused on real world tasks, is community-oriented, values-centred and has a strong future's perspective. Universities and other academic institutions would then become the hub of transformation of communities

and societies. Their graduates would be tuned into the sustainable development of their societies, of recognising that a country is more than a 'beach', a place for their self-pleasuring but a 'country' where the interlocking ecological, social and economic systems have to be attended to if there is to be quality of life for all of the people and not just a few.

Service Learning Contextual Framework

To educate for sustainable development is to educate with community/society in mind. Such an education can, for that reason, be seen as participating in the tradition of service learning. An examination, therefore, of service learning theories should help clarify how such an education should be 'delivered' as through those lenses we examine our existing approaches, changes that may be needed, the gaps, the inconsistencies, contradictions, etc.

The literature on service learning, with its many different labels, (community service learning, community field experience, community referenced learning) is extensive, as Solomon and Levin-Rasky (2003) point out. They draw our attention to the many initiatives designed to forge relations between institutions of learning and communities. At base is the notion of academic learning that encourages civic responsibility and community action. Real community needs are addressed while students learn through active engagement (Anderson, 2009).

The aim is, as Moely *et al.* (2002) discuss, for students to become more civic-minded, more interested in community issues and solving social problems. Service learning is also based on a philosophy of education that sees education as developing social responsibility, as preparing students to be involved citizens in a democracy (Anderson, 2009). Students are encouraged to see their achievement in terms of their service to the community.

Much of the literature on service learning speaks mainly to its purpose, as indicated in the preceding paragraphs. There is, however, some attention paid to its process, as the following paragraphs discuss.

In exploring the process of service learning, the literature identifies its foundational principle – learning by doing as practitioners, like McAleavey (2009) explains. McAleavey, invoking Dewey (1938), reminds us that one learns as well as or better by doing; that education is not only about books but about experience and connecting what one reads and hears with ongoing observation and experiences. Such learning is not a passive collection of information but is active learning, at base a constructivist teaching strategy connecting learning to real world activity (Williams, 2009). In other words, service learning is learning by doing but in the context of doing service.

With the focus on learning by doing, service learning dissuades students from the notion that educational success simply means finding the right answer. Instead they are encouraged to see education as a way to engage in addressing complex problems in a complex setting (Billig & Brown, 2009). As a result, the teaching and learning process becomes more analytical and reflective. Students are thus being directly and openly prepared to apply knowledge; this, as often happens, is not left as a possible outcome of learning.

Connecting learning in academia to real world activity, making the connection between academic learning and community needs, is nonetheless, at the heart of service learning. It is

the feature that is most often emphasised by a number of writers (Kaye, 2004; McAleavey, 2009; Swick, 1999, Williams, 2009). McAleavey (2009) asserts that service learning is a particularly appropriate pedagogy for courses that have social awareness components. I would argue that all our courses need to have social awareness components, especially as we move towards including a sustainability perspective in our programmes.

This kind of learning encourages students to see beyond personal aspirations and achievements, to recognise that it is in saving their communities that they too are saved. Larson-Keagy (2005) aptly expresses this idea in her reference Garrett Hardin's (1968) 'Tragedy of the Commons', which illustrates how self-interest leads to the destruction of the commons but *enlightened self-interest* (my emphasis) recognises that long-term sustainability of the commons is a shared responsibility.

Service learning raises, however, a number of issues related to assessment and pedagogical practices in institutions of higher education. Standard forms of assessment are your pen and paper essay questions, theses and so on, which have a long tradition of assessment demanding varying levels of rigour. Assessment of service learning, on the other hand, is more openended and as a result could be charged with being less rigorous. Yet, as I have suggested earlier, assessment of university education should take into account the level of transformation of community, the level of sustainability of the commons in which the university is located. This would require, of course, relevant forms of audit tools for this kind of assessment. Also the conventional pedagogical style of lectures and tutorials would have to give way to more on the field, on-site learning.

The discussion on the concept of service learning highlights its value and indicates the direction such learning should take. To summarise, service learning advocates learning by doing, active learning, at base a constructivist teaching approach, students applying knowledge learnt, connecting what they read and hear with ongoing observation and experiences, engaging in addressing complex problems in a complex setting and so being focused on real world tasks.

However, the literature does not speak to the radically new relation that is required between community and academia for sustainable change to take place. And it is this new relation that is needed if we are to educate truly for sustainable development/sustainability/sustainable futures; it is a relation that demands a shift from teaching and learning that is academic-centred to one that is community-centred as the selected ESD initiatives indicate. The extent to which these initiatives are able to effect this change, the paper argues, is the extent to which the teaching and forged.

Therefore even as an education for sustainable development is positioned within the tradition of service learning, we see it as extending this tradition as the urgency of transforming our societies impels a different way of teaching and learning.

Description of ESD Initiatives in the Caribbean Region

The initiatives selected are: Community Service Learning in Social Studies Cave Hill, University of the West Indies (UWI), Barbados; a Literature and ESD course at Mona, UWI, Jamaica; and the Sandwatch Project, which is regional. These are all documented in the UNESCO 'Teachers' Guide for ESD in the Caribbean' (UNESCO, 2010). Additionally, there is the Peace Promotion

Programme in Trinidad and the Biodiversity Project in Jamaica, as described on the UNESCO Innovemos website.¹

Community Service Learning in Social Studies, as described by Anthony Griffiths (UNESCO, 2010) is an approach to teaching through serving community, by addressing the concept of development and ways of sustaining the society and the environment.

With this approach, students begin by identifying a community that they would like to serve. They select the service activity based on the needs in the community and the topic being studied in class. A range of services is undertaken by the students, from direct engagement to indirect, in which the students work with the community in a supportive role, through advocacy or through an agency. Examples of projects undertaken have included water conservation projects and the raising of awareness of local hazardous waste and collection sites.

In the Sandwatch project students monitor the beach and beach activities, addressing problems they note. In the Bahamas, for example, a group of students addressed reef damage by tourists who carelessly stood on it to adjust their masks as they prepared to scuba dive and thoughtlessly broke off pieces for souvenirs. In a simple yet meaningful act these students created a brochure on proper reef etiquette for tourists. It was action that spoke to knowledge of the importance of reefs, of tourists to the region and of respect for both the environment and the human beings involved.

The Literature and ESD course in many ways combines elements in the previous two initiatives discussed – providing knowledge about sustainability issues, engaging in community and taking action to address the issue. Specifically, the course aims to explore the concept of sustainable development and what it means to educate for a sustainable future, to teach about environmental/sustainability issues, and to engage students in sustainability practices. Literature is the vehicle through which the exploration of the 'content' of sustainable development takes place and the major means through which students are motivated to take action for creating a sustainable world. A model for how ESD can be infused through other disciplines, the course focuses on ways of addressing sustainability problems in communities. As part of their course work, students identify a sustainability problem in their community and engage in a community action project similar to that described in community service learning. Projects have included managing waste, recycling, greening a school environment, school vegetable gardening, developing a 'literacy for peace' project, building HIV/AIDS awareness for teens, documenting local knowledge through work with senior citizens. A reflective log details students' involvement, the lessons learnt, the impact and the value of the project.

The next initiative reflects the emphasis on environmental education – an indication of the way sustainable development is often conceptualised in the region. The Biodiversity Project is a collaborative effort by a non-governmental organisation and an educational entity, the Joint Board of Teacher Education at the University of the West Indies, to educate lecturers and student teachers about biodiversity. Each college involved has initiated one project on biodiversity and has integrated it to some extent into the curriculum. Examples of projects include a herb garden, a butterfly sanctuary and a vegetable garden. These projects not only involve a wide cross-section of the college community, but by their nature engage with the community beyond the college walls.

The final initiative to be discussed is one that reflects direct engagement with the social dimension of sustainable development – that is, a peace project. Violence is a major sustainability problem in a number of the islands in the Caribbean. The Peace Promotion Programme – 'Putting People in the Path to Peace in Trinidad', like the 'Change from Within' programme in Jamaica (see Down *et al.*, 2007) – addresses the need to create a society in which peace prevails. The programme is about creating a peace that entails self-discipline, self-esteem, respect, a non-violent approach to resolving conflict and a sense of democracy.

The programme consists of interactive workshops. Local artists and indigenous art and cultural forms are used to spread the message of peace and ways of achieving peace. Specifically, the programme offers training in mediation, peer counselling and conflict resolution as well as a pre-carnival preparation programme. The latter helps students to avoid negative behaviours associated with carnival, such as alcohol and other drug abuse, sexual promiscuity and fighting. Complementing these workshops is a skill-based alternative education project for students who are under-achieving. Additionally, there are projects focused on teachers, which include training courses in 'stress and anger understanding and management' as well as 'alternatives to corporal punishment'.

Analysis and Reflection

These initiatives mentioned here indicate the approach to teaching and learning that is needed for an effective ESD. They do, however, have a major limitation, which is that they fall outside the mainstream curriculum. There are a number of reasons for this, including the relative unfamiliarity of the concept of ESD in the region. The main reason for their marginal position, though, is that education is more concerned with the market and than with public good (Lotz-Sisitka *et al.*, 2007). Educational institutions are still too distant from community. This limitation, nevertheless, does show us what we need to do in order to identify content and pedagogy that will make our educational institutions more attuned to serving their community.

At the core of these initiatives is the central place of community. Many of the definitions of ESD discussed earlier suggest, too, this need for a focus on community, even though this may be interpreted in a number of ways. What is evident in these initiatives is that community determines content and shows us the kind of pedagogy that is needed for an education that takes into account the quality of our present life and the survival of our species. The radical departure from the conventional that these initiatives demonstrate (in varying degrees) is in the what and the how of education; that is, in its content and pedagogy. As such they suggest the new relation that needs to be forged between academia and community.

The community speaks to the choice of content – that is, the kind of knowledge, including the kind of values, attitudes and skills, that are needed for a sustainable society both locally and globally. In reflecting on the initiatives, one notes that students are expected to observe their community and identify its needs, problems and issues. So Griffiths' students (in the community service learning described earlier) undertook projects related to water conservation, hazardous waste and collection sites. The Sandwatch group centred on the beach and its activities, noting as they did so the problems with the reefs. Species at risk became the focus of the Biodiversity

group and peace initiatives, conflict management the work of the Peace Promotion Programme in Trinidad. Peace building, greening, recycling, waste management and school garden were some of the responses to community needs in the Literature and ESD course.

What these initiatives suggest is that the content of our educational programmes should be determined to a large extent by the needs of the community – its need for water conservation, waste management, reef protection, species protection, peace, etc. Our teaching and learning should not be a matter of simply following a syllabus. Instead we should allow our curriculum to be 'written' as students interact with community. This is not to deny the value of a given curriculum; it shows instead the need for a curriculum to be open to the 'directives' from the community. The major difference is that it is not the curriculum determining what should be in community (as in, for example, field trips to concretise what is being taught in classrooms), but it is the community deciding what should be done in the curriculum.

This 'new' relation between content and community in an ESD programme or ESD-framed curriculum will require attention to be paid not only to the issues emerging in the local community but also to the global community, to the 'education for sustainability agenda'. Scott and Gough (2004) in fact suggest that Agenda 21 and action plans of subsequent UN conferences (for instance, those focusing on climate change) should be the basis and inform the critical content of ESD. Of course, a focus on the local community would mean also exploring an issue such as climate change in terms of what it will mean for people in that community.

What this approach emphasises is education in and for community. Topics in the curriculum are issues that need to be attended to in the community. There is the shift from that of passive, text-bound learning to that of active real-world learning. Students see the immediate value of acquiring knowledge as it is needed. Peden's (2008) call for a strong knowledge base is placed in a context that emphasises application not acquisition. Research then becomes a truly needed and primary activity.

If the main site for learning becomes the community, then learning in discrete disciplines will have to yield to a more cross-disciplinary approach. The students studying beach activities needed to understand the science of the reefs, communication skills for advocacy, etc., so it became very clear that the knowledge needed to address a community's problems did not lie in any one discipline.

The work on water conservation in the Social Studies initiative, a topic primarily focused on the physical environment, would be broadened as students' participation in community will make obvious the economic and social implications. Similarly, the activity of waste management will encourage students to recognise the relation between managing waste and blocked gullies, flooding, erosion, destruction of coral reefs, destruction of livelihoods and the engendering of social and economic problems. There is thus the emphasis on the connections between the environment, the society and the economy. The debate about whether ESD de-emphasises the natural environment or not is 'resolved,' as it becomes clear that whether one begins or ends with nature, the relation of nature to human beings is ignored at our peril.

Equally important is the emphasis on values education and on the development of critical thinking, problem solving and system thinking skills. The UNDESD implementation strategy as well as the definitions quoted earlier highlight the importance of values: respect, tolerance,

democracy, social justice, peace and harmony. In supporting a shift to that kind of emphasis in education, Orr (1994) makes the important point that much of the world's problems have been the work of the highly educated. He thus argues for a different kind of education, quoting Wiesel (1994) who warned against an education that emphasises theories instead of values, concepts rather than human beings, abstraction rather than consciousness, answers instead of questions, ideology and efficiency rather than conscience, as he saw this as the kind of education that those responsible for much of the world's horrors had received. Orr's (1994) insistence, too, that the planet does not need more 'successful' people but instead peacemakers, healers, restorers, storytellers and lovers of every kind further supports the need for an education that emphasises values, people, and consciousness.

The pedagogy that such a community-centred education requires can perhaps be most clearly expressed in how values can be learnt. Students learning/working in community begin to identify with the community. As they pay attention to its needs and attempt to address them in concrete ways, the community becomes important to them. The reef is not some distant reef, the Swallowtail butterfly not some insignificant creature, but special because they are trying to save it. The sense of belonging to a particular place is developed. And from such beginnings come a sense of respect and caring for the physical environment and its people. The method of learning shifts from being individual-focused to that of community-centred. Engagement at this deeper level with community leads to students understanding their essential connection with the whole.

There is thus a big shift away from the concept of education as the progress of the individual, as upward social mobility for the individual, to that of progress for the community and the individual in community. Students become community-centred rather than self-centred.

Moreover, this approach to education is one that builds and fosters community rather than separating individuals from their community, as so often happens when students leave their communities to acquire education but remain distanced from community. This is further illustrated in the practical work done by the students as they address in concrete ways the identified need of the community, literally 'getting their hands dirty' in many instances. Creating a vegetable garden in a school or a nearby community 'field' will require students to engage in digging, planting, weeding and watering. Recycling plastics will require the actual collection of plastic bottles, often strewn around a community or piled up on a beach. Waste management may mean a beach clean-up, the gathering of rubbish and safe disposal of it or creating a compost heap.

The pedagogy, too, is one that is based on working closely with community members, meeting and planning how to create a more sustainable community. Some of the responses to the needs in the community called for help in advocacy. Students cannot do this without major input by the community members. What is being encouraged is a relationship between students and community members that based on collaboration, taking action together to effect meaningful change. It is also working with a wide range of members of the community — as was the case with the Peace Promotion programme, which involved local artists and parents.

Community members, especially the elders/senior citizens of the community, are seen as sources of knowledge and wisdom. Education becomes a kind of conversation, of teaching and learning, between students and community members. This allows for the 'recuperation' of valuable local knowledge as students interact with different members of the community.

Together they share and pool their knowledge for the good of the community.

Attending to community, observing its landscape, its environment, being physically there, is also a major difference between the usual teaching and learning which takes place primarily in a classroom and one that shifts to community being the primary classroom. 'Outdoor education' takes on a whole new meaning as students gain the benefits of working closely with nature as a number of environmentalists have pointed out. But, in addition to this, students are working directly and immediately to build community. The 'give back' to society, the stated and unstated expectation of those who benefit from formal education is not 'delayed', nor does it come with the usual attendant attitude of the 'superior child returning to teach his/her parent'.

The limitations of the initiatives discussed also point the way to the some of the challenges of positioning the academy in community. For the most part, community involvement is marginal, an addendum almost to the main way of teaching (lectures and tutorials) rather than the central way of teaching, which is what I have been arguing for. Furthermore, the interaction between lecturer, student and community members is very much located in the old paradigm of the academy being the privileged 'partner'. There is at base a failure to recognise that what the academy offers and what the community offers are different but equally important. 'True' collaboration and conversation are needed and dependent on sharing of power. At the very least the power relations need to be examined; the student interviewer and the community member interviewee if cast in the hierarchical self/other relation are unlikely to effect the substantial changes needed. Teaching and learning possibilities are immense in a model in which community members, students and lecturers come together in service to community. Perhaps traditional societies offer such a model.

These initiatives also indicate the existing fragmented approach to addressing sustainability issues. What is urgently required is a whole university approach to community. Imagine a model in which faculties identify a major community need or needs and identify what and how each department in the faculty could address this/these. What if teaching and learning centred on this? There would be interlocking circles of communities (academic and non-academic) which would decide on content. The pedagogy would be the actual work in the community linking with the research and discussion in academia. The learning would come about as students reflected on their task in community, as they researched through dialogue with their lecturers; that is, 'transformed lectures', conversation with community members, and texts (scholarly and non-scholarly) to find 'answers' to the needs identified and implemented these 'answers'. In other words, a dialogic relation between the academy and community, with each group interfacing and so nurturing the other, replaces the conventional separation of the two. Assessment takes the form not only of theses, articles and books, but also and more importantly the changes that have occurred in community.

Conclusion

This paper has argued that to educate for sustainable development requires a dialogic (as opposed to hierarchical and distant) relation between academia and community. The academy in collaboration with its community plans the lessons and identifies the tasks that are needed to

address the problem. The strength of the academy – its research and theoretical knowledge – is enhanced by the experiential knowledge of the community. The flow of knowledge and the synergy with such an approach, allows for more creative, on-the-ground and effective student learning.

Our universities are in an ideal position to advance such a pedagogy by positioning themselves inside communities. Instead of having to build walls to secure themselves from their communities they can work in a more focused and integrated way to transform these communities by building on the principles underlying the initiatives discussed here. Academia becomes validated by its work to make local (and in turn national, regional and global) communities more sustainable.

What I am proposing is of course being attempted, but often in a fragmented, unstructured way. The challenge is how to bring this together, to re-fashion our relation to community and with that our teaching and learning. Further research on this is required. In this regard, the present Mainstreaming Environment and Sustainability in African Universities (MESA) programme (Lotz-Sisitka *et al.*, 2007), which advocates a 'new' relationship between academia and community, demands our close attention. The initiatives analysed show us that pedagogy for sustainable development is pedagogy that is responsive to the needs of community, that centralises instead of marginalises community. It is teaching and learning that takes place through collaborating with community and engaging in community work. It is pedagogy reconstructed as dialogue between academia and community.

The vision of ESD is an education that is deeply responsive to the urgent environmental and socio-economic needs of our times. The goal is no less than the creation of a citizenry mindfully engaged in building a just, peaceful and environmentally safe world. Yet their fulfillment still waits for the radical repositioning of community in academia and a pedagogy so aligned.

Notes on the Contributor

Lorna Down is a Senior Lecturer in the Institute of Education, UWI, Mona. She has published in the areas of literature, education for sustainable development, violence in schools and intervention programmes. Her current research focus is in the field of literature, education for sustainable development and teacher education. Email: lornadown@yahoo.com; lorna.down02@uwimona.edu.jm.

Endnote

1. www.redinnovemos.org, visited February 2010.

References

Anderson, J. (2009). Service learning and teacher education. www.ericdigests.org, visited 10 August 2009.

- Billig, S. & Brown, S. (2009). Service learning to enhance academic achievement. www. seanetonline.org/.../, visited 11 November 2009.
- Collins-Figueroa, M. (2008). Introduction to environmental education and sustainable development in the Caribbean. *Caribbean Journal of Education*, 30(1), v–xii.
- Dewey, J. (1938/1997). Experience and education. New York: Touchstone.
- Down, L., Lambert, C., McPherson-Kerr, C. & Solomon, P. (2007). Transforming the culture of violence in Jamaican schools: Innovative intervention model. In Mutura, K. & Sunal, C. (Eds), *The enterprise of education*. Charlotte, NC: Information Age Publishing. pp.231–249.
- Hardin, G (1968). The tragedy of the commons. Science 162, 1243-1248.
- Hopkins, C. (2008). Plenary discussion, International Advisory Committee Meeting for ESD World Conference, Paris, 31 October 2008.
- Kaye, C. (2004). The complete guide to service learning. Minneapolis: Free Spirit.
- Keggy, L. (2005). Local to global perspectives on community, civic engagement, and service learning. Address at Howard Community College. www.mc.maricopa.edu/other/engagement/.../LarsonKeggy, visited 10 June 2005.
- Lotz-sisitka, H., Lupele, J. & Ogbuigwe, A. (2007). Translation processes in the design of an education for sustainable development innovations course for universities in Africa. *Journal of Education for Teaching*, 33(2), 157–175.
- McAleavey, S.J. (2009) Service-learning: Theory and rationale. http://www.mc.maricopa.edu, visited 11 November 11 2009.
- McKeown, R. (2006). Education for sustainable development toolkit. Education for sustainable development in action, learning and training tools no. 1, 2006. Paris: UNESCO Education Sector.
- Moely, B., McFarland, M., Miron, D., Mercer, S. & Illustre, V. (2002). Changes in college students' attitudes and intention for civic involvement as a function of service learning experiences. *Michigan Journal of Community Service*, Fall, 18–26.
- Orr, D. (1994). Earth in mind: On education, environment and the human prospect. Washington: Island Press.
- Peden, M. (2008). Education for sustainable development: Knowledge and environment in South African schooling. Southern African Journal of Environmental Education, 25, 13–24.
- Sterling, S. (2001). Sustainable education, revisioning learning and change. Devon: Green Books.
- Sterling, S. (2004). The learning of ecology, or the ecology of learning? In Scott, W. & Gough, S. (Eds), *Key issues in sustainable development and learning*. London: RoutledgeFalmer. pp.68–70.
- Scott, W. & Gough, S. (Eds) (2004). Sustainable development and learning: Framing the issues. London: RoutledgeFalmer.
- Solomon, P. & Levine–Rasky, C. (2003). Teaching for equity and diversity: Research in practice. Toronto: Canadian Scholars' Press.
- Swick, K. (1999). Service learning in early childhood teacher education. *Early Childhood Education Journal*, 27(2), 129–137.
- UNESCO (2005a) United Nations Decade of Education for Sustainable Development: Links between the Global Initiatives in Education. UNESCO Education for Sustainable

- Development in Action, Technical Paper Technical Paper No. 1. Paris: UNESCO. http://www.unesco.org/education/desd.
- UNESCO (2005b) United Nations Decade of Education for Sustainable Development draft international implementation Scheme. http://www.unesco.org/education/desd, visited September 2009.
- UNESCO (2008a). *Teachers' guide for ESD in the Caribbean*. Santiago: UNESCO Regional Bureau of Education for Latin America and the Caribbean, OREALC/UNESCO. http://www.unedoc.unesco.org/images.
- UNESCO (2008b) The Regional Education Innovations Network Innovemos. http://www.unesco.org/education, visited October 2008.
- UNESCO (2010) Teachers' guide for ESD in the Caribbean. http://www.unedoc.unesco.org/images, visited February 2010.
- Williams, J. (2009). Service learning: Practical guidance from theory. http://www.allacademic.com, visited 11 November 11 2009.
- Witter, M. (2007). Climate change and Jamaica: Sustainable development as strategic adaptation. Environmental Foundation of Jamaica 5th Annual Public Lecture, 8 November 2007, Kingston, Jamaica.