

Participating in the UN Decade of Education for Sustainability: Voices in a southern African consultation process

Heila Lotz-Sisitka Rhodes University, South Africa

Editor's Note

Normally the EEASA Journal opens with a keynote address from an EEASA Conference. Instead, this opening paper of the 2006 EEASA Journal reports back to EEASA members on the consultation process led by the Southern African Development Communities' Regional Environmental Education Programme (SADC REEP) on participation in the United Nations Decade on Education for Sustainable Development (UNDESD). Consultations were hosted in 14 southern African countries. Workshop consultations were also held at the EEASA Conference in Zambia in 2005 and a report on this consultation process was provided at the EEASA Conference in Zimbabwe in 2006. Over 150 EEASA Conference delegates submitted questionnaire inputs into this process, with more participating at country level in the consultations. In the end, over 600 participants in the SADC region contributed to this process which resulted in the production of four books (Lotz-Sisitka, Olvitt, Gumede & Pesanayi, 2006a; 2006b; 2006c; 2006d) published by Share-Net and the SADC REEP.

Abstract

This paper documents the outcomes of the consultation process on participating in the UNDESD which was led by the SADC Regional Environmental Education Programme in 2005/2006, assisted by the Rhodes University Environmental Education and Sustainability Unit and Environment Africa. The goals of the consultation process were to explore interpretations and meaning-making around the global discourse of ESD in a southern African context. Findings from the consultation process provide useful baseline information on the status of debate on sustainable development in educational circles; participation and partnerships; insights into environmental and sustainability education (ESD) practice and mechanisms needed for supporting this practice. The paper ends by outlining a research agenda for ESD in southern Africa, as discussed during the consultation process.

Introduction to the UNDESD

Current global discourse on Education for Sustainable Development (ESD) has its roots in the history of two distinct areas of core interest for the United Nations: (1) quality basic education and (2) sustainable development. It has a longer, more complex history which is intertwined with the emergence of environmental education, and later with the concept of sustainable development in international institutional discourse. Promoted by the Japanese government and

partners who were concerned with the role of education in furthering the global objective of sustainable development, a United Nations Decade of Education for Sustainable Development (UNDESD) (2005-2014) was proposed and endorsed at the World Summit on Sustainable Development (WSSD) in 2002. In December of the same year, the United Nations Decade of Education for Sustainable Development was adopted by the UN General Assembly through resolution 57/254, with UNESCO designated as the lead agency.

Contemporary global discourse on Education for Sustainable Development has emerged as a 'hybrid' concept, which amalgamates earlier environmental education roots with UNESCO priorities. UNESCO views the Decade as an opportunity to strengthen and extend policy frameworks and action programmes undertaken within the existing framework of Education for All (EFA) and the UN Decade for Literacy (UNESCO, 2005). UNESCO sees Education for Sustainable Development as a mechanism for adding focus and relevance to these efforts, and as a means of enabling countries to achieve the Millennium Development Goals through education (ibid.). In Africa, the UNDESD is seen as an opportunity to strengthen the African Union's Second Decade of Education (2006–2015) and the human resource development requirements of NEPAD and its Environmental Action Plan. The Sub-Saharan Strategy for the UNDESD emphasises the importance of situating the UNDESD goals and objectives in African cultures, knowledge systems and experience (UNESCO-BREDA, 2006). There is, however, little guidance provided on what exactly this might mean, but there is a recognition that the UNDESD and concepts of Education for Sustainable Development will need to be deliberated and interpreted at sub-regional, national and local levels (UNESCO, 2005) for these to be meaningful in practice. This paper provides some insight into this deliberation and meaning-making process at a sub-regional (southern African) level, albeit at a broad level.

The overall goal of the Decade, as articulated by UNESCO 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, 2005)

This statement gives the appearance of certainty surrounding the principles, values and practices of sustainable development and that, once defined, these can simply be integrated into all aspects of education and learning. The statement reflects policy discourse, which is often couched in propositional terms, with little space given to uncertainty, complexity and contextual diversity. As such, one of the primary goals for the UNDESD is laid out in the UN General Assembly Resolution 59/237 in which the General Assembly '... encourages Governments to consider the inclusion ... of measures to implement the Decade in their respective education systems and strategies and, where appropriate, national development plans'.

However, to establish clarity of purpose and the measures to 'implement the Decade' into education systems, strategies and development plans requires a deeper understanding of what is meant by sustainable development in a particular context, and of how the concept of ESD is being viewed and appropriated in particular contexts. This paper aims to provide insight

into what the 600 southern Africans who participated in this consultation process have to say about sustainable development, and ESD, at the start of the UNDESD. The paper does not aim to provide in-depth critically probing or theoretically inspired analyses of this discourse, but merely aims to report on this discourse to readers. Further analyses and interpretations of the discourse are always possible, and may be the subject of further writings in future.

The Consultation Process and Methodology

The Education for Sustainable Development (ESD) consultation process involved a series of national workshops in 14 southern African countries.² The national workshop consultation participants included some 360 state and civil society organisations and some private sector organisations. Organisations that participated all have an interest in education and training initiatives that can help society re-orient towards poverty alleviation, food security, ecological sustainability and health. The consultation process was complemented by a contextual profile development process, and a literature review (Lotz-Sisitka *et al.*, 2006a). A further 150 individual questionnaires were received mainly from EEASA members/EEASA conference delegates in southern Africa and, in some countries, local level workshops also provided information that has informed the development of this report. In total, over 600 participants in southern Africa made contributions to the consultation process over a six-month period.

The initiative aims to contribute to implementation of the Environmental and Sustainable Development Operational Plan of the SADC Regional Indicative Strategic Development Plan (SADC RISDP) in which environmental and natural resource management is to be strengthened through environmental education, information exchange and exchange of experience amongst SADC member states. It also supports the efforts of UNESCO, who have launched an International Implementation Scheme to guide implementation of the United Nations Decade of Education for Sustainable Development (UNDESD) from 2005–2014 (UNESCO, 2005), and a Sub-Saharan Strategy for ESD (UNESCO-BREDA, 2006).

The consultation process resulted in a number of key findings (see Lotz-Sisitka *et al.*, 2006a; 2006b; 2006c; 2006d). For the purposes of this paper, only the main findings are shared, and readers are encouraged to source the more comprehensive consultation reports for more detailed insights. Findings cover the following key areas covered in the consultation process: (1) interpreting ESD discourse, (2) forming partnerships and fostering broader participation, (3) ESD practice and how it is viewed and (4) how ESD practice may be supported at institutional level; a research agenda for ESD in southern Africa is also outlined.

Finding 1: Inadequate debate on sustainable development

There is inadequate debate on Education for Sustainable Development and Sustainable Development. (Zambian ESD Consultation Report)

There is a lack of knowledge on sustainability issues. (Botswana ESD Consultation Report)

There is a lack of information on key areas such as environmental health and sustainable development issues. (Swaziland ESD Consultation Report)

As can be seen in the citations above, the consultation process revealed that there is inadequate debate about sustainable development in southern Africa, and that research and policy implementation processes for sustainable development are not providing the knowledge and orientation necessary for ESD practitioners to engage in robust debate and critical review of sustainable development approaches in a southern African context.

The literature review undertaken for the purposes of informing interpretations of ESD in southern Africa (Lotz-Sisitka et al., 2006a) revealed that there are a number of complex lines of debate that inform ESD discourse, none of which have been resolved in ESD discussions in a southern African context. These lines of debate are briefly outlined here, and provide a broader context for deliberations on what ESD might focus on:

- Can the development-as-growth model be sustained? This line of debate considers evidence at a global level that human development is not progressing as effectively as Western economic models of progress and development would have us believe. Recent human development reports show that the current economic model is leading to greater inequalities between the rich and the poor. In southern Africa, many more households are now poverty stricken, compared to 10 or 20 years ago - this is despite a massive growth in the global economy and related production and consumption patterns. Economic growth under the contemporary neo-liberal model is not solving unemployment, but is creating a global trend towards 'jobless growth'. While transnational corporations control over 33% of the world's productive assets, they employ only about 5% of the global workforce (Rosenberg, 2004). Rosenberg (2004:230) notes that '... one of the most dangerous aspects of the current model of development is that it is so resource intensive that it cannot be multiplied on a big enough scale to benefit all people'. Human beings are already consuming more resources than the Earth can renew, and are overshooting its capacity by an estimated 30%. 'The bulk of this overconsumption is enjoyed by only 20% of the world's population, who consume 80% of its resources' (ibid.). These 20% of the world's population also hold the most power in terms of global decision-making, which makes it more difficult to change the dominant patterns and status quo (Rosenberg, 2004).
- How to change this development-as-growth trajectory? The environmental movement has been at the forefront of calling for the development-as-growth model to be scaled down, for more equitable sharing of the Earth's resources, and for development that takes place within the limits of the Earth's capacity to renew its resources that sustain both life and development. This has led to a complex and protracted debate on how this should be done, leading to the introduction of the idea of 'sustainable development' in the 1980s in the World Conservation Strategy (IUCN et al., 1980), and then in the Brundtland Report (WCED, 1987), produced by the World Commission on Environment and Development in 1987. There appears to be wide-ranging consensus at a global level in the powerful institution-media-academic matrix that sustainable

- development is a preferred approach to changing humanities' development path, but this is not without problems. Some have described it as a 'salvation narrative' (see Lotz-Sisitka 2004 for a critique of this salvation narrative).
- How should sustainable development be understood and implemented? The last 15–20 years have seen vociferous debate in international circles on how sustainable development should be conceptualised, and how it should be implemented. Rosenberg (2004) explains that one argument that has been widely supported by capitalists around the globe is the notion that more development is needed to pay for environmental protection and to reduce poverty. This view has been widely supported by many of the international institutions such as the World Bank and the International Monetary Fund, who have also played a significant role in convincing governments in southern Africa that this is the best approach to address environmental and poverty-related problems. The problem with this dominant view is that some have interpreted it to mean 'more of the same kind of development'. The argument is that poverty and suffering occur because there is not enough economic growth. This has led to a shift in focus from the original discussions on sustainable development which were about sustaining living resources, to sustaining development, which is why there is so much contestation about sustainable development today.
- Sustainable development as an ambiguous guiding framework for education. As a result of these debates, sustainable development provides a complex and ambiguous guiding concept for education, and can easily be mis-interpreted and appropriated to serve a variety of interests (including those who wish to sustain business-as-usual approaches to development). Because of its flexibility of use in a variety of contexts, and its contemporary political currency, sustainable development has become part of a common vocabulary among those who are concerned about the impact of human activity on the ecological basis of human existence (the environment). Sustainable development has also become strongly associated with a moral imperative to change the way that human development is taking place (Hattingh 2002:5). However, as Hattingh (2002:5) indicates 'while the term sustainable development has become widespread in recent times, there is little indication that a clear global consensus has also emerged about the content, the interpretation and the implementation of this moral imperative'. For example, southern NGO critique of the World Summit on Sustainable Development pointed to an appropriation of sustainable development discourse by neo-liberal economic market forces, with vociferous and critical perspectives on the implications of this for social justice and ecological sustainability (Lotz-Sisitka, 2004).

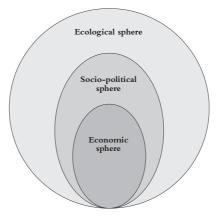
From the above discussion, we see that Education for Sustainable Development is situated in a complex political economy in which the fundamental assumptions of human development and political economies are being placed at the centre of critical investigation and attention. The SADC REEP's Futures Research project (Lotz-Sisitka, 2004) argued that any ESD initiatives in southern Africa would need to incorporate a careful and critical look at the prevailing perspectives on sustainable development, and patterns of appropriation within the prevailing political economies of the day, particularly where poverty alleviation is to be a major goal

of sustainable development. The SADC REEP's Futures Research project also argued for continuity and expansion of environmental education initiatives in and as ESD in southern Africa, given the high levels of dependence on natural resources for livelihoods amongst the 75% of southern Africans that live in rural areas (Lotz-Sisitka, 2004). It also highlighted the serious crisis surrounding health risk, and drew attention to the need for a closer examination of the relationship between health risks, poverty and environmental degradation, and associated challenges for education.

One of the key aspects of Education for Sustainable Development would therefore seem to be a need to foster critical review of ways in which sustainable development is being interpreted, appropriated and applied in different contexts. If this is not done, sustainable development could become just another ideology that leaves the status quo, with all its risks and injustices, much as it is (Hattingh, 2002; Lotz-Sisitka, 2004). As shown in the Lotz-Sisitka (2004) research, it can also lead to a demise the environmental dimension for sustaining economic growth as a trajectory, which has potentially serious consequences in a southern African context.

Hattingh (2004) presents alternative conceptions of sustainable development. He argues for a 'strong' model of sustainable development (see Figure 1) to counter ideological interpretations of sustainable development which privilege one of the so-called three spheres of sustainable development as if it is more important or more urgent than all the others. This model, he argues, avoids, for example, an economistic ideology which focuses primarily on economic considerations; it avoids an environmentalist ideology which focuses primarily on the conservation of the biophysical environment; and it similarly avoids a social ideology which sees social issues as more important than environmental or economic issues. As such, the 'strong' model of sustainable development presents a challenging context for new knowledge-creation and for educational thinking and practice in southern Africa.

Figure 1. A model of 'strong' sustainability (from Hattingh, 2004)



Sustainable development requires a new ethic, radical changes (particularly in economic systems) and long-term thinking (Rosenberg, 2004). It requires us (a) to take seriously the impact of current models of development, (b) to generate viable solutions to complex challenges at

micro- and macro-levels, and (c) to think of future generations and the opportunities that will be available to them.

The SADC REEP consultation process revealed that there are many educational initiatives in southern Africa that are attempting to take up this challenge in various ways. Educators attending the SADC REEP consultation process indicated that they were responding to a diverse range of issues and challenges through their educational practice (not everyone was responding to the same issues and challenges – this presents a 'collective picture' of what the 600 participants in the SADC region are responding to). These included (amongst others):

- Environmental issues and risks such as increased environmental degradation; over-exploitation of natural resources for short term benefits; land degradation decline in productivity of the land, food insecurity; fresh water contamination; air pollution; solid and liquid waste management, including special waste such as medical waste; drought; wildlife depletion, poaching and loss of biodiversity; deforestation; desertification; water wastage, pollution and inadequate sanitation; vulnerability to environmental change (e.g., floods, droughts, global warming); coastal zone degradation and marine issues (degradation of the marine environment and marine resources); current approaches to energy provision (fossil fuel dependent, nuclear, etc.); use of toxic products and inadequate management of toxic waste; loss of natural heritage; land use conflicts and uncontrolled urban development.
- Social issues, risks and challenges such as HIV/AIDS resulting in a deepening of poverty, lack of alternatives, and a lack of participation in development initiatives; other health risks such as malaria; malnutrition and health of children; gender inequality, discrimination and vulnerability of women and children to health risks and abuse; street children and orphans (children without adequate care); industrial health issues and decrease in general levels of wellness in the work place; increased vulnerability; population growth and settlement patterns; social values and moral regeneration; and the quality of education (which was seen to be too theoretical), and the valuing of education in society (in some societies education is a low priority); instability in the human resource-base due to the impact of HIV/AIDS, economic hardship and poverty.
- Economic challenges such as poverty and decrease in standards of living; high levels of unemployment; food security; skewed distribution of land and wealth; land tenure systems still tied to traditional systems; time constraints and other constraints imposed by donors and funders; high costs of inputs and low selling prices for products; consumerist culture and lifestyles particularly amongst the rich and the youth (i.e. new influences on youth culture); lack of integration between private sector initiatives and public planning processes; dominance of globalisation and neo-liberal economic approaches; structural adjustment policy impacts (e.g., job losses and unemployment); lack of resources/inadequate resources for development initiatives; economic policy and management; sharing of resources equitably (regionally and globally); shortage of resources needed to provide adequate housing, facilities and capital for appropriate development; inadequate resources for social services such as health and education.

• Political challenges such as corruption; poor governance; lack of political commitment; lack of synergy amongst government departments, policies and implementation strategies; governments are responding to policies rather than needs on the ground – there are gaps between policies, practice and needs on the ground; short-term objectives of politicians; failure to implement policies; decentralisation of policy making (linked to lack of synergy and lack of capacity for delivery and implementation); war and lack of security.

The organisations working to address these issues are many and diverse, and all country consultations agreed that partnership approaches, and broad participation of society would be needed to responding adequately to the challenges outlined above. This is discussed in more detail in the next section.

Finding 2: Partnerships and participation in the UNDESD

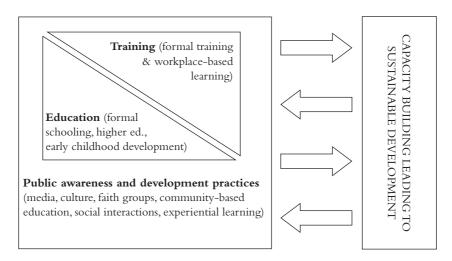
Sharing resources between institutions and sectors can strengthen the value and quality of environmental learning/ESD. (Namibian ESD Consultation Report)

One of the most striking features of the SADC REEP consultation process was the evidence of a rich diversity of partnerships and networks that are currently operating in the southern African region to implement environmental and sustainability education objectives. It seems that southern African environmental and sustainability education practitioners have developed a range of sophisticated partnership approaches and networks to enable their practices to take place. From the evidence presented in the consultation process, it could be stated that partnerships and networking are one of the cornerstones of environmental and sustainability education practice in southern Africa.

The objectives of the UNDESD introduce an educationally inclusive framework for participation involving education (formal schooling, universities, colleges); training (vocational education and training); and public awareness and community development (informal education and training initiatives). This inter-linked relationship can best be conceptualised within a framework of life-long learning (see Figure 2 on the following page).

The profile of participants who engaged in the SADC REEP consultations included a variety of sectors and types of organisations who appear to have an interest in the objectives of the UNDESD. Educational organisations and environmental/natural resource management organisations were dominant in the consultations. Other organisations that appear to have an interest in the UNDESD include cultural and scientific organisations; health and social welfare organisations; NGO networks and associations; faith-based organisations; youth organisations; trade, industry, economic affairs and business organisations; energy production and service organisations; local government organisations; media organisations and donor funded-projects (donor organisations), although representation from these different groups was less prominent.

Figure 2. Education for Sustainable Development in a context of life-long learning (adapted from Scott & Gough, 2003)



In the education sector, groups involved in the consultations included:

- UNESCO national commissions (relatively good representation)
- Policy makers ministries and departments of education (good representation)
- Curriculum development centres (some representation from some countries)
- Assessment and examination directorates (poor representation)
- Universities and teacher education colleges (universities appear to have been better represented than teacher education colleges)
- Community-based education programmes (some representation from NGOs, but poor representation from NGO coordinating groups)

Education stakeholders who were not present in the ESD discussions included:

- · Early childhood development organisations
- Adult literacy/ABET organisations
- Textbook production organisations
- Educational associations and networks (including the Education for All networks)

The training sector has an important role to play in broadening participation in the UNDESD, and in achieving the objectives of the UNDESD. During the SADC REEP consultation process, the training sector was mostly represented by colleges of technology and polytechnics (who do vocational education and training). Absent from the consultations were agricultural colleges and training institutions; local government training organisations; business training programmes and organisations; and tourism education and training institutions. At this stage, it would seem that strategies need to be developed to further involve the vocational education and training sector in discussions on environment and sustainability education in southern Africa.

From a public awareness point of view, the participation profile indicates that there is also a need to strengthen the participation of the media, faith-based organisations, and NGO networks, as well as the rural development sector in UNDESD activities.

From a sectoral perspective, it would seem that environmental education and training organisations, and environmental policy development and natural resource management organisations are already actively contributing to the UNDESD. An interesting new development is the interest shown in sustainability issues in the energy production and services sector. The agricultural sector are also beginning to show more interest in sustainability issues. Cultural organisations, health organisations, social development and welfare organisations are also beginning to make contributions to environmental and sustainability discourse in southern Africa. The participation profile indicated that strategies need to be developed to strengthen the participation and contributions of new environmental/natural resource management sectors (e.g., energy, agriculture), while also paying attention to the inclusion and broader participation of social, cultural and economic institutions. In particular, labour unions and business associations (the private sector more broadly) need to be more centrally involved in the UNDESD debates in southern Africa. Organisations that are responding to gender issues, human rights issues and health-related issues are also important partners in the UNDESD, as are donor organisations and the local government sector.

Involving stakeholder groups and creating partnerships to respond to the diversity of challenges outlined above appears to be an important strategy for making meaning of the UNDESD in southern Africa, and a deeper understanding of why groups form partnerships could also strengthen inclusive approaches to participation in the UNDESD. The consultation process identified the following values associated with partnerships:

- Educational value (i.e., one achieves a better quality educational output/product as a result of forming a partnership)
- Impact value (i.e., the end result of your initiative is more effective as a result of a partnership)
- Cultural value (i.e., the partnership allows for cultural exchange, cultural experience and cultural knowledge)
- Efficiency value (i.e., resource sharing to maximise efficient use of available resources)
- · Knowledge exchange value (i.e., sharing of cross-sectoral knowledge and experience to enrich the learning experience and learning outcome)
- Community and communication value (i.e., partnerships create a sense of community, and they also have potential to contribute to enhanced communications)
- Project sustainability value (i.e., partnerships are likely to enhance the longer term sustainability of development initiatives)
- Information exchange value (i.e., partnerships allow for the easy exchange of information and build a more knowledgeable and responsive network of ESD practitioners)
- Diversity value (i.e., partnerships allow for diversity of interest and for synergy across diversity)
- Innovation value (i.e., partnerships allow for experimentation of new approaches and ideas, and for a supportive network in which to experiment and innovate)

The UNESCO (2005) International Implementation Scheme indicates that ESD is 'fundamentally cross-sectoral' and that it engages a wide variety of institutions. It notes, further, that the effectiveness of the UNDESD will depend on the strength and inclusiveness of the

partnerships, networks and alliances that develop amongst stakeholders at all levels. The SADC REEP consultations indicate that it may be useful to not only form partnerships, but to consider the *value* of partnerships, and how this value can be maximised through careful cooperative engagements at different levels. Partnerships, it was agreed, are only useful if organisations and individuals have something to work on, which leads into a discussion on ESD practice (i.e. the focus of activity).

Finding 3: ESD³ practice and quality

The SADC REEP consultations revealed that just as there are many stakeholders and partnerships active in implementing the objectives of the UNDESD, there is also a rich variety of educational practice that is responding to environmental and other sustainability challenges in the southern African region. The consultations also revealed that environmental and sustainability education practitioners are reflexive about this practice, in the sense that they are critically reviewing its effectiveness in relation to the context in which the practice is taking place.

Different dimensions of environmental and sustainability education practice were discussed, providing insight into 'what counts' and what needs to be done to enhance ESD practice in southern Africa. These dimensions of ESD practice are discussed below.

Involving people in sustainable development actions

There was strong consensus across countries that it is important for ESD processes to involve people in sustainable development actions. There was concern that current ESD practices were not really contributing to viable development strategies or to meaningful poverty alleviation and improved quality of life. This introduces a focus on practical action into ESD discussions in a southern African context. While there was a strong support for, and motivation to include a focus on practical action in ESD, there was little guidance provided in terms of how this should be done. There were three themes that arose from this discussion:

- There is a need to encourage and further develop *participatory approaches* and methods in ways that are not superficial and token.
- Educational practices are not the only solution to poverty, environmental degradation, health risks and other sustainable development challenges, and there is a need for *integrated solutions*.
- There is a need to involve people in questioning and critically evaluating the
 appropriateness of environmental and sustainability education practices in enabling/
 constraining sustainable development solutions. This may also require critical evaluation
 of the way in which sustainable development concepts are being appropriated and used
 in different contexts, which requires a more sophisticated level of reflexivity.

Participatory, active and learner-centred methodologies

The consultations provided insight into the wide array of methodologies that are used by ESD practitioners in the southern African region. While different opinions were voiced about which

methodologies were useful and valuable, little evaluative evidence was available for a deeper analysis of the effectiveness and value of these methodologies. There was, however, strong consensus that participatory approaches such as Participatory Rural Appraisal, environmental action learning and action research were vitally important to the successful implementation of environmental and sustainability education programmes and objectives. Participation in learning introduces a range of associated changes to educational practice, such as inquiry-based methods, critical learning opportunities through debates and group work, and opportunities for experiential learning. In the Mozambique, Zambian, South African, Namibian, Swaziland, Tanzanian and Zimbabwean ESD Consultation Reports, participatory methodologies were cited as being most successful.

Dealing with complex issues

One of the major challenges facing ESD practitioners is to develop the skills and abilities to deal with such complex issues, given that environmental and sustainability issues are historically located, complex, contingent and different in different contexts. A number of perspectives were shared on the issue of dealing with complexity, and a strong case was made for the need to enhance capacity of professionals to deal with complex issues in context. This included the need for capacity to deal with ideological ambivalence and ideological 'blockages'; conflict, tensions and contradictions; and community expectations in the face of high levels of poverty, risk and vulnerability.

Working with values, ethics and cultural diversity

Questions of values and ethics in education were also discussed during the consultation process. Participants had various views on (a) the importance of foregrounding values and ethics in educational practice, and (b) on how this could best be done in a southern African context which is characterised by high levels of cultural diversity.

Strategies for values education – such as involving learners in useful community projects, modelling of behaviours and actions and appropriate role models, creating platforms for dialogue and debate, and engaging people in reflections on existing values, actions and alternatives – were discussed. Productive and positive relationships and the building of group values, and developing critical media, were also seen as important strategies. A more complex area identified was the need to work with the values that are embedded in modern education systems. It was noted that strategies for managing, accommodating and embracing diversity in terms of culture, religion, ability and language needed to be developed. Language diversity, in particular, presented many environmental and sustainability practitioners with different challenges, and multi-lingual and additive multi-lingual strategies were recommended. Cultural diversity was also the subject of much discussion. For example, different culturally defined conceptions of human rights issues were discussed, and it was noted that human rights issues are expressed in the SADC region at policy level and that these expressions have been influenced by international/globalising processes such as an individual human rights and global human rights culture. It was argued that ESD practitioners should be explicit about the tensions, and encourage deliberations of these issues at local levels, to allow for different cultural perspectives

to emerge and be debated, and to recognise that culture is not static, and is always both shaping and being shaped by human actions and experiences.

Creativity and critical thinking

The consultations also highlighted the importance of creativity and critical thinking in environmental and sustainability education practice. To strengthen critical and creative thinking, a wide variety of strategies is being used by environmental and sustainability education practitioners – such as the use of open-ended questions, case studies, experiments, research-based role plays and dramas. Dialogue forums and debates were also seen as important strategies to foster critical thinking along with excursions and hands-on activities, farming trials and other action-oriented approaches. Exposing learners to multiple perspectives that are also multi-disciplinary in nature was identified as being important. One of the challenges identified was the lack of appropriate teacher education programmes that promote critical and creative thinking. Acceptance of the *status quo* was also identified as a challenge, as well as dealing with resistance to change. Critical media literacy was also cited as being an important process, particularly to deal with issues such as consumerism.

Working with different ways of knowing (particularly indigenous knowledge and local knowledge)

Another significant area of discussion in the consultations centred on knowledge and its origins, its construction and how different ways of knowing (epistemologies) are to be accommodated and worked with in ESD practice. In particular, the importance of indigenous, traditional and local knowledge was foregrounded in discussions. Discussions also reflected a 'taken for granted' validity associated with scientific knowledge and information provided by scientific institutions on environmental issues and risks. The qualities of indigenous and traditional knowledge systems and educational approaches was also brought into discussion in the consultations, affirming a sense of an African cultural fabric/s of traditional and indigenous ways of knowing and learning, as described by this extract from the Zambian ESD Consultation Report:

For the vast majority of Zambian traditional societies, education was an integral part of everyday life, long before the colonialists and western educationalists came to this part of the world (Mwanakatwe, 1968). Traditional education involved a detailed understanding of the local biological resources and helped to develop knowledge and skills that enabled people to adapt to, and manipulate their land, flora and fauna. Mwanakatwe observes that by the time a child became a teenager, he/she had been exposed to an educational process enabling the acquisition of knowledge and skills for survival and adulthood. In traditional education, conservation was often realised in a pattern of shared beliefs, cultural taboos, folklore and myths. These embodied a common interest among communities to conserve natural resources and viable social structures and practices ... Since the advent of colonisation, Western education systems have influenced traditional approaches to ESD and learning.

A key challenge identified by ESD practitioners is the lack of capacity and research on mobilising indigenous knowledge in education, in the context of environment and sustainability issues. There was a strong consensus that mobilising indigenous knowledge was a very important feature of ESD practice in southern Africa. This would seem to be a key area for future research and development in the UNDESD.

Ensuring inclusivity in ESD practice

There are certain cultural practices that hinder inclusivity ... an inclusivity policy has been developed and workshops for in-service teachers have been held. (Swaziland ESD Consultation Report)

The processes and politics of inclusion and exclusion in ESD practice was also discussed during the consultation process. Particular attention was given to the inclusion of learners with disabilities, but discussion also centred on cultural and linguistic inclusion. Various practical strategies were shared as to how one can address questions of exclusion in ESD practice. What was not discussed in any depth were the historical and structural constraints that lead to, and create patterns of, inclusion and exclusion in society. This would appear to require deeper probing in future ESD practices and research.

The dimensions of ESD practice outlined above will require substantial support from institutions and individuals, particularly educational leadership. The consultations highlighted a range of dynamics that would need to be attended to if ESD practices (as outlined above) were to be strengthened.

Finding 4: Supporting ESD practice

As shown in the discussions above, ESD practice has many interesting dimensions which are both challenging and creative. These processes offer opportunities for actively contributing to societal and environmental change through education. However, these ESD practices will simply remain 'nice to have's' if adequate institutional and policy support is not provided. Similarly, good monitoring and evaluation strategies will be needed (see Lotz-Sisitka et al., 2006c; 2006d). For ESD to be mainstreamed, curriculum and learning support materials will need to be developed, revised and adapted. Adequate resources will be required to support ESD initiatives. These structural and institutional factors will require as much attention during the UNDESD as processes of teaching and learning. The next section of the paper briefly discusses these vitally important processes that are required to support and extend ESD practice.

Policy review, development and use

The SADC consultations indicated that ESD practitioners in southern Africa were responding to a plethora of different policies. These policies included:

• International policies and conventions such as Agenda 21 (UNCED, 1992), the Johannesburg Implementation Plan (produced at the WSSD in Johannesburg, September 2002), the UNDESD International Implementation Scheme (UNESCO, 2005), etc.

- National policies from the environment and natural resource management sector, the social welfare sector, the education and training sectors and the health sectors (amongst others)
- Locally relevant policy frameworks such as those guiding municipalities, organisations and institutions (e.g., school policies)

This created a complex and challenging policy environment, and it was evident across the 14 country reports that environmental and sustainability education practitioners in southern Africa are grappling with 'policy complexity' and 'policy overload'. It is not surprising therefore that one of the strongest points made about policy review, development and use was the need for creating greater policy synergy. The process of enabling policy synergy may, however, be more complex than simply 'aligning' different policies and their objectives. Discussions and insights reported in the SADC REEP evaluation (Rosenberg, 2005) indicate that creating policy synergy will require a deeper understanding of the contexts of policy production and use, as well as an understanding of the premises of the policies themselves. This is clearly an area that requires further research and development during the UNDESD. The consultation process also identified inadequate attention to policy implementation and evaluation processes, and the need for professional and capacity development to enhance participation in policy processes as being important considerations (see Lotz-Sisitka *et al.* 2006d for a more comprehensive discussion on policy issues).

Advocacy and vision building

There is generally weak advocacy and vision building. (Zambia ESD Consultation report)

Advocacy and vision building has been identified by UNESCO as an important strategy for ESD. UNESCO (2005) explains that

... people must envision what it means to live within environmental limits, to interact in peaceable, equitable, and in just ways, and work sustainably ... Beyond envisioning a sustainable future, the success of the UNDESD requires widespread advocacy to promote ESD. Advocacy should take place at all levels and involve all stakeholders. Governments and civil society should maintain a permanent dialogue in which issues are aired and where common agendas are forged through ongoing conversation, debate and mutual learning. Because of its broad and deep impact, the media has a very important role to play in advocating for a more sustainable future.

The consultations indicated that there are various examples of advocacy and vision-building processes that can be expanded and taken further in future, although this did not come through as a major area of activity for ESD practitioners in southern Africa (perhaps because of the policy overload described above!). However, as indicated by the citation above, advocacy and vision building appear generally to be weak, and this may therefore indicate a need to focus on this in the UNDESD.

Institutional capacity building

Institutional capacity building was recognised as being a key issue to consider. There were numerous calls for giving more attention to building human resource capacity (also discussed under professional development and training), strengthening leadership, and addressing financial and resourcing issues. There was, however, not much analysis of what it takes to strengthen institutional capacity. The importance of integrating into existing structures and then supporting changes within these structures was emphasised, as were whole school development approaches. Whole school development approaches were seen to be of value because they created opportunities for all stakeholders in the school-community context to learn together. This eliminates second-hand information, which tends to become distorted, and also eliminates the problem of a lack of ownership and participation in initiatives.

Fundraising, financial management and project design and management

Donor driven projects need to be aligned with existing structures in the institutions to promote a sense of ownership and sustainability. (Lesotho ESD Consultation report)

Inadequate resources were identified as a key concern in all the ESD Consultation reports and questionnaires. It is, however, not only the availability of resources that is of concern to southern African practitioners, but also the way in which the resources are procured and managed. In particular, donor-funded initiatives drew a lot of comment in the consultations. Discussions here centred on the phenomenon of 'donor fatigue' and 'development fatigue', where certain groups are over-exposed to development initiatives, due to particular donor or government agendas. ESD practitioners identified the need for influencing project design processes in such a way that donor-funded projects were more adequately aligned with existing structures and processes in countries, and that their sustainability is attended to from the outset. Capacity for financial management and project management was also identified as an area that needed attention.

The role of governments in providing financial support and partnership funding was also discussed, and it was felt that strategies need to be found to make better use of existing government funds and resources. ESD should not be seen as a 'new thing' but should be seen as an effort to broaden and strengthen existing government policy initiatives in more coherent and synergistic ways. Partnership strategies were seen to be vitally important in this process.

Professional development and training

In the consultation process, it was noted that there is a need to broaden understanding of sustainability issues, and to strengthen and extend partnerships and networks to facilitate knowledge exchange and skills development. While there is extensive experience and expertise available for implementing ESD practice, there are still many areas of ESD practice that need enhancing and extending. There was a strong sense that there was a need for sharing, expanding and enhancing knowledge and expertise through professional development programmes. The role of regional exchange, networks and professional development programmes was mentioned

as being valuable. In particular, the point was made that greater reflexive capacity needed to be developed in and through professional development programmes.

UNESCO (2005) argues that special attention should be given to integrating ESD concerns into teacher education programmes. This was also a key issue identified in the consultations, as was the need to develop better capacity to implement workplace-based learning approaches. While much has been learned about professional development that is reflexive and context-based, there is still a need to expand and extend professional development work in the southern African region to address the capacity constraints and the broadening of ESD practices in the region.

Curriculum development work

Curriculum should not be static, but dynamically moving to integrate global experiences and also emerging societal issues related to poverty alleviation. There is also a need to integrate issues that affect the majority of people in the region (poverty alleviation) if learning is to be meaningful to the community. Curriculum must meet needs of the people and the community. (Zambia ESD Consultation Report)

Discussions on curriculum development work centred on two main themes, notably (1) the necessary structures to enable such curriculum development work to take place, and (2) the content and approaches that were most appropriate in addressing environment and sustainability issues in curriculum contexts.

Appropriate structures. Appropriate structures need to be created for enabling the integration of environmental and other sustainability issues into national curricula. Subject panels were identified as important structures to interact with in various countries such as Lesotho, Namibia and Botswana. Specially constituted committees are also a possible way forward for dealing with environmental and sustainability issues in the curriculum. For example, in Lesotho there is also a Population, HIV/AIDS and Environmental Education Committee to coordinate initiatives aimed at integrating 'emerging issues' into the curriculum. Involving examination and assessment structures was identified as being critical to the success of incorporating environmental and sustainability issues into the national curriculum. Formalising partnerships was also identified as a possible approach for establishing appropriate structures for ESD curriculum development work. For example, in the Democratic Republic of Congo a suggestion was made to formalise the partnership between the Ministry of Primary and Secondary Schools and the Ministry of University Education to ensure appropriate elaboration of a programme for environmental education/ESD. Similarly in South Africa, a need was expressed for the Department of Education to formalise its partnerships with other government departments and ESD stakeholders.

Curriculum content and approaches. There was clear recognition that environment and sustainability issues are cross-cutting, and require multi-disciplinary responses. Questions arose as to how these cross-curricular multi-disciplinary issues should to be incorporated into existing curriculum models and frameworks. In Lesotho, for example, it was noted that 'other emerging

issues of concern need to be incorporated into already existing issues to avoid confusion and over-loading of the curriculum'. It was noted that establishing a 'unit' where those working on these different emerging issues (environmental issues, population issues, HIV/AIDS issues) could work together to ensure that similar approaches were used, and where work on these issues could be conceptualised in complementary ways, was a useful way of making sure that confusion, duplication and curriculum overload were avoided (Lesotho ESD Consultation Report). Most of the southern African countries are engaged in a variety of initiatives to integrate and infuse emerging issues (e.g., environmental issues, human rights issues, gender issues, HIV/AIDS) into the mainstream curriculum. This has led to various strategies and debates as to how this should best be done, which include infusion approaches (which involves infusing these issues into existing curriculum frameworks); integrated approaches (which involves cross-curricular strategies such as project work and local investigations, where knowledge and skills from various subjects are all used to address the same issue/set of issues); and re-orientation of subjects to include emergent issues (ESD issues) as integral to the subjects (this involves restructuring subject content and outcomes to incorporate emerging social issues so that these become a key dimension of what is learned in the subject. This implies that emerging issues are valued in the same way as any other content and skills in the subjects, and that they are integrated into the assessment systems and are also dealt with in textbooks and other 'normal' curriculum processes).

There was strong consensus across all of the consultation reports that environment and sustainability education should be contextual and that one of its main educational objectives should be to develop strategies and approaches that allow for contextually relevant learning processes. This did not negate the importance of centrally defined curricula to guide national educational systems and the inclusion of these issues in the centrally defined curricula, but rather provided an argument for models of national curricula that allow for contextualisation of knowledge and skills development.

Leadership

It is necessary to educate the leaders and build leadership. (DRC ESD Consultation Report)

Leadership in ESD and in curriculum change processes was identified as being of crucial importance to the successful transformation of curricula in southern Africa towards sustainability. The Botswana ESD Consultation report for example recommends that Heads of Institutions should be trained as structural leaders. There is a need to strengthen the capacity of educational leaders (at all levels in the system) to respond to the contemporary situation in southern Africa, where social, economic and environmental issues are affecting the lives and livelihoods of learners everywhere. There is a need for a new vision to develop around the role of schools and educational institutions in society, and this will not be possible without effective leadership. There was, however, very little insight provide as to how such leadership capacity ought to be developed.

Learning support materials development, access and use

Good learning support materials can strengthen ESD. (Namibian ESD Consultation Report)

There was consensus that learning support materials were an important dimension of ESD, and that learning support materials should be produced for learners in all sectors of the community and for all learner groups. There was also strong support for participatory approaches to learning support materials development, as it was noted that these 'enhanced the relevance' of the learning support materials and also facilitated the use of materials as people felt some ownership of the materials. A concern for more effective use of existing learning support materials was also identified. There was also some concern about duplication of efforts when it comes to learning support materials development. It was said that different organisations produce their own materials and there is no coordinated effort to synchronise these efforts or to avoid duplication. Another issue associated with coordination was alignment of materials to the curriculum objectives or learning outcomes in formal education settings. Often ESD practitioners developed materials that were sector-priority specific (e.g., water materials or energy materials) with little cognisance of how teachers should integrate these priorities into their planning and practice in the course of the year, term or lesson. Another issue identified related to the availability of ESD materials and it was felt that although good materials are produced, they are often not produced in adequate quantities. It was also noted that there was a need for building capacity for materials development. The importance of forming partnerships between educators and scientists/researchers was identified as being key to the development of up-to-date materials that carry the latest information and perspectives, or that can create the pathways for learners to access such information. It was noted that better use could be made of the plethora of reports that are produced by the research community on sustainable development issues and that strategies should be developed to assist educators and learners to use these materials more effectively (and not re-invent the wheel).

Information Communication Technologies (ICTs)

Another striking feature of the SADC REEP consultations was the complete lack of attention given to Information Communication Technologies (ICTs). None of the groups discussed ICTs and their use in ESD programmes. The media drew more attention from ESD practitioners and mention was made of the powerful influence of television and radio, and how these media could be harnessed for strengthening ESD in southern Africa. There were, however, some discussions on the lack of systems for effective communication, and the lack of appropriate tools for managing baseline data and information.

UNESCO (2005) notes that ICTs have particular implications for ESD, most notably:

- ICTs are central to basic knowledge economies where wealth is generated by the transfer and use of information in ways that use fewer natural resources
- ICTs offer new learning modes and spaces, and can contribute the effectiveness of distance learning opportunities. The Internet, in particular, offers new avenues for

connectivity and participation in the economy and in knowledge networks

- ICTs also provide opportunities for global dialogue
- ICTs contribute to the development of essential lifeskills in modern economies

Perhaps the lack of discussion on ICTs is reflective of the context of relatively poor connectivity in southern Africa, and the predominantly rural nature of the economy and society. Innovative approaches to strengthening access to, and use of, ICTs in ESD programmes would seem to be an issue that needs attention in the southern African context in the UNDESD.

Implications for Research and Innovation

As indicated above, the consultation process has provided a rich starting point for deliberations on ESD in southern Africa. The key to these deliberations is the process of building on existing environmental and sustainability education initiatives, and a broadening of participation and knowledge about ESD in the southern African region. Given that the EEASA Journal is a research journal, the final section of this paper will focus on the insights gained from the consultations into a research agenda for ESD in the next Decade in southern Africa as a way of concluding the paper.

UNESCO (2005) indicates that traditionally there is a lag of about 10 years or more for new discoveries and new knowledge to be incorporated into school curricula and other educational programmes. UNESCO (2005) also indicates that ESD efforts in the UNDESD need to be informed by research and development work. The consultation process identified key areas where research is needed, as well as other insights useful for strengthening a research agenda in the forthcoming decade.

Areas where research is needed

The consultations revealed that research is needed to:

- advance the conceptual, theoretical and methodological development of ESD in southern Africa,
- strengthen and extend existing environment and sustainability education pedagogies, their relevance in society and their reality congruence,
- strengthen and extend the effectiveness and value of partnerships and networking processes,
- strengthen curriculum development approaches and implementation strategies for mainstreaming of ESD concerns into education systems,
- inform workplace-based learning and new approaches to training and professional development to strengthen reflexive practice,
- · explore and extend the possibilities offered by the mobilisation of indigenous, traditional and local knowledge,
- · develop strategies that can address complexities and value-based questions in the teaching and learning process in a context characterised by high levels of cultural and linguistic diversity,

- explore the relationship between ESD, environmental management, health promotion and poverty reduction,
- establish frameworks for conceptualising and evaluating quality in ESD practice and support mechanisms,
- explore processes of mainstreaming ESD issues and approaches into various education
 and training settings such as schools, higher education institutions, teacher education
 programmes, vocational education and training colleges, agricultural extension services,
 etc., and
- provide baseline information on ESD practices and create longitudinal studies to evaluate the effect of ESD programmes and initiatives, and to document existing practices.

In general, there was a strong sense that there was a need to enhance the 'reality congruence' and 'real-world contributions' of ESD research. This has implications for both: the design and conduct of research, and the dissemination of research findings. It was felt that the potential of methodologies that allow for real-world contributions to ESD practice needed to be further developed and expanded.

Scientific knowledge generation and ESD research

A distinction was also made between research on sustainable development – for example, conducting research on food-related issues and sustainable agricultural practices, and ESD research which was centred more on the applications of research knowledge through effective educational strategies and approaches. There was a general consensus that there was weak utilisation of knowledge from research to influence the direction of sustainable development, which is leading to a gap between knowledge applications and practice, and inappropriate appropriations of sustainable development discourse (as outlined in the first part of this paper).

The relationship between research that is being undertaken by scientific institutions to generate new knowledge on sustainability issues and educational (ESD) research and practice was also discussed, and it was noted that a closer partnership needs to exist between mainstream scientific research institutions and educational research institutions, so that educational practices can be informed by and also inform mainstream scientific research on sustainability issues. The 'divisions' between the social sciences and natural sciences also need to be addressed, as sustainability issues are integrated issues that require integrated and multi-disciplinary responses.

Research as a learning process

It was also noted in the consultations that ESD research should develop methodologies and approaches that allow for participation in research processes, and that research should be viewed as a learning process in itself. Research should not be seen as the product of 'ivory towers' but should actively seek to involve youth, learners, teachers, industries, communities and governments in learning more about environmental and sustainability education issues, processes and practice (for example, more effective ways of mobilizing indigenous knowledge in educational processes, or more effective ways of participating in learning support materials development programmes). In this context, a recommendation was made to strengthen classroom-based action research so that research can be broadened to include all teachers in southern Africa.

Capacity building for research

There was consensus that research issues should be prioritised, and capacity-building needs associated with those research priorities need to be assessed. Strategies to strengthen research capacity in southern Africa need to be actively pursued. It was noted that there were few research institutions for environmental and sustainability research outside of South Africa, and institutional linkages and exchanges that strengthen research capacity across southern African countries need to be actively pursued during the UNDESD. A process of broadening research capacity building institutions for ESD in southern Africa needs to be conceptualised and actively pursued at national levels, and through regional structures and institutions that facilitate research capacity building in southern African countries.

Financial support for ESD research

It was also noted that there was a need to lobby for political and financial support for environmental and sustainability issues in research funding institutions, and that southern African researchers should seek international support from scientists and scientific organisations. Cooperation between national and international levels was seen as an important strategy for enhancing the viability of ESD research, and its status in national research institutions.

Research to support information exchange on ESD practice

As indicated above, the consultation process identified that a rich array of ESD practice is taking place across southern Africa, but there little systematic documentation of these initiatives. There is therefore inadequate baseline information on how to carry out and design educational practices that respond to environmental and other sustainability issues. This lack of information also inhibits opportunities for information exchange and learning from others in a regional and national context. The annual EEASA conference and workshops and other conference opportunities were seen as an important forum for information and knowledge sharing, but it was noted that the quality of research contributions in these forums needed to be enhanced. The EEASA Journal and EEASA Bulletin also provide important forums for information exchange on ESD practice and research.

In Closing

This paper has provided an overview of what was clearly a richly textured dialogue in the southern African region. Insights gained into the 'status' and complexity of sustainable development discourse clearly require educators to engage critically and reflexively with this 'salvation narrative' that has emerged in international discourse. Discussions on partnerships and participation have indicated that there are 'core' constituencies that are already active in conceptualising the UNDESD in a southern African context, but that more effort needs to go into 'bringing in' a broader constituency. Insights into ESD practice indicated that southern Africans have a good sense of 'what counts' as good ESD practice, and this work can be taken forward into the development of guidelines for, and dialogue on, good practice, and can provide inspiration for further creative and critical work in the field of environment and sustainability education. The insights into the support systems and processes also indicate that southern Africans have a good sense of how to further the aims of the UNDESD at a sub-regional level, and various strategies and suggestions for further work have been put forward. A policy agenda for the UNDESD has been put forward through this research (Lotz-Sisitka *et al.*, 2006d), and some very useful insights have been provided for shaping and influencing a research agenda. The paper has started to provide insight into the meaning-making processes that are possible in response to policy discourses that, instead of being appropriated as 'certainties with inbuilt clarity', are more emergent, deliberative and open-ended. As mentioned at the start of this paper, all of the data and insights provided here can be subjected to various layers of further analysis and interpretation, and researchers are invited to take up this important critical project in the UNDESD.

Notes on the Contributor

Heila Lotz-Sisitka holds the Murray & Roberts Chair of Environmental Education and Sustainability at Rhodes University. She holds a doctorate in education from Stellenbosch University for research into participatory educational materials development. She has been a leading figure in establishing environmental education in the South African Curriculum and in the National Qualifications Framework in South Africa. Her research interests include curriculum policy research, participatory approaches to learning, social change and research methodology. She serves on the UNESCO international reference group for the UNDESD and is Editor of the Southern African Journal of Environmental Education. Email: h.lotz@ru.ac.za.

Endnotes

- 1 The World Summit on Sustainable Development endorsed Chapter 36 of Agenda 21 (Rio Earth Summit, 1992) on Education, Training and Public Awareness which first proposed that education and training systems around the world need to re-orient towards sustainable development.
- 2 The individual ESD Consultation Reports are not available as public documents; the information in these reports has been synthesised in the four publications by Lotz-Sisitka *et al.* (2006a; 2006b; 2006c; 2006d).
- 3 When referring to ESD practice here, I make reference particularly to environmental and sustainability education initiatives, given the dominance of the environmental and natural resources sectors in the ESD consultations.

References

Hattingh, J. (2002). On the imperative of sustainable development: A philosophical and ethical appraisal. In Janse van Rensburg, E., Hattingh, J., Lotz-Sisitka, H. & O'Donoghue, R. (Eds), *Environmental education, ethics and action in southern Africa*. EEASA Monograph. Pretoria: HSRC Press. pp.5–16.

Hattingh, J. (2004). Speaking of sustainable development and values ... A response to Alistair Chadwick's Viewpoint 'Responding to destructive interpersonal interactions: A way

- forward for school-based environmental educators'. Southern African Journal of Environmental Education, 21, 157-165.
- IUCN, UNEP & WWF. (1980). World Conservation Strategy: Living resource conservation for sustainable development. International Union for Conservation of Nature and Natural Resources: Gland.
- Lotz-Sisitka, H. (2004). Positioning southern African environmental education in a changing context. Howick: SADC REEP/Share-Net.
- Lotz-Sisitka, H., Olvitt, L., Gumede, M. & Pesanayi, T. (2006a). History and context of ESD in southern Africa: Supporting participation in the UN Decade of Education for Sustainable Development. Howick: SADC REEP/Share-Net.
- Lotz-Sisitka, H., Olvitt, L., Gumede, M. & Pesanayi, T. (2006b). Partnerships, networking & ESD in southern Africa: Supporting participation in the UN Decade of Education for Sustainable Development. Howick: SADC REEP/Share-Net.
- Lotz-Sisitka, H., Olvitt, L., Gumede, M. & Pesanayi, T. (2006c). ESD practice in southern Africa: Supporting participation in the UN Decade of Education for Sustainable Development. Howick: SADC REEP/Share-Net.
- Lotz-Sisitka, H., Olvitt, L., Gumede, M. & Pesanayi, T. (2006d). Policy support for ESD in southern Africa: Supporting participation in the UN Decade of Education for Sustainable Development. Howick: SADC REEP/Share-Net.
- Rosenberg, E. (2004). Sustainable development maintaining profits, or sustaining people and planet? In Parry-Davies, D. (Ed.), The enviropaedia. 'Networking for sustainability' edition. Cape Town: Eco-Logic Publishing. pp.229–232.
- Rosenberg, E. (2005). SADC regional environmental education programme evaluation. Howick: Share-Net.
- Scott, W. & Gough. S. (2003). Sustainable development and learning: Framing the issues. London: Routledge-Falmer.
- UNCED (United Nations Conference on Environment and Development). (1992). Agenda 21. Rio de Janeiro: United Nations Conference on Environment and Development.
- UNESCO (United Nations Educational, Scientific and Cultural Organization). (2005). United Nations Decade on Education for Sustainable Development. International Implementation Scheme. w ww.unesco.org/education/desd.
- UNESCO-BREDA. (2006). Strategy of Education for Sustainable Development in sub-Saharan Africa (draft for comment). UNESCO-BREDA.
- WCED (World Commission on Environment and Development). (1987). Our common future. Oxford: Oxford University Press.

Acknowledgements

This paper would not have been possible without the research, management and writing support provided by Mumsie Gumede (project manager), Lausanne Olvitt (researcher/ author) and Tichaona Pesanayi (researcher). The consultation process was funded by Sida and Danida under the auspices of the SADC REEP EEASA members are acknowledged for their contributions to the consultation process.