



Viewpoint Paper

Towards Integrating Education for Sustainable Development at Initial Teacher Training: The Case of Lesotho College of Education

'Mantoetse E. Jobo, Lesotho College of Education

Abstract

This viewpoint paper presents some findings of a participatory action research programme carried out by teacher trainers at the Lesotho College of Education (LCE) in order to integrate education for sustainable development (ESD) into its courses. It reveals how social learning brings about deep meaning as students connect subject content knowledge through participatory learning to their sociocultural backgrounds. Participants were later interviewed to ascertain their views on teaching for sustainable development and on interdisciplinary collaboration as a means of enhancing quality in teaching and learning. The findings indicate that some participants had, as a result of the action research project, been able to emerge from the culture of academic isolation through initiating collaboration with other teacher trainers outside the study area.

Introduction

This viewpoint paper reports on a participatory action research programme undertaken by teacher trainers at the Lesotho College of Education (LCE). The programme is a component of a study carried out by the Southern African Development Community Regional Environmental Education Programme (SADC-REEP) higher education institutions as part of the Environment and Sustainability Education and Educational Quality and Relevance Research Network. It seeks to enhance interdisciplinary collaboration that has been lacking among faculties at the LCE (Burke & Sugrue, 1994).

Education in Lesotho generally fails to address issues of sustainable livelihoods; hence innovation for job creation and the employability of people is hampered. To this end, section 28(a) of the Constitution of Lesotho requires that education be directed to the full development of the human personality, as well as a sense of dignity and strengthening of respect for the human rights and fundamental freedoms of the Basotho.

Educational Quality in Lesotho and the Need for a Paradigm Change in Teacher Education

Lesotho needs to develop people as a resource that can support development (Lesotho Government, 2004a) and provide relevant education that equips young people with practical and marketable skills (Lesotho Government, 2004b), particularly in an era of job scarcity. Any parent concerned about the overwhelming dependency syndrome (Lesotho Government, 2009) prevailing among the Basotho desires to see young people equipped with skills that

will enable them to act responsibly in accordance with the prevailing circumstance (Lesotho Government, 2004b).

The government contends that, 'through the provision of a sustainable, improved, quality assured, universal, *free* and compulsory primary education' (Ministry of Education and Training, 2005:43), poverty can be reduced and development enhanced. However, despite the adult literacy rate in Lesotho (82% in 2002) (Kingdom of Lesotho, 2007; Ministry of Education and Training, 2005), there is evidence that educational quality is still poor. This is attributed to a number of factors that are cause for concern, such as the following:

- Poor education that places great importance on passing the final examination (Lesotho Government, 2004a; Mokuku, Jobo, Raselimo, Mathafeng & Stark, 2005), with the best teaching resources often being concentrated in the final year of study (Lesotho Government, 2004a);
- Inadequately trained teachers and diminishing numbers of qualified teachers servicing the education system; and
- A curriculum that is characterised by an excessive number of academic subjects that are generally irrelevant to many people, with minimum development of the practical skills (Mokuku *et al.*, 2005) that are essential for the integration of graduates into the employment market (Kingdom of Lesotho, 2007).

Educational quality, relevance and equity have been emphasised as fundamental requirements needed to turn the tide of underdevelopment and end the vicious cycle of poverty, unemployment and environmental degradation that severely threatens the country (Ministry of Education and Training, 2008). Nonetheless, policy documents fail to be explicit in spelling out pertinent issues of quality and relevance, and their interpretation has been 'left to individual education practitioners with no clearly articulated and comprehensive guidelines' (Ministry of Education and Training, 2008:i).

Lotz-Sisitka (2011) urges that governments should take the lead in spelling out meanings of contentious topics such as *quality* and *relevance* that are open to many interpretations, otherwise the implementation of programmes to address such critical issues is highly questionable (Ministry of Education and Training, 2008). The most recent Curriculum and Assessment Policy Framework identifies quality and relevance as key aspects of implementation in teaching and learning programmes. Teacher education institutions are called upon to review their training programmes to align them with this policy (Ministry of Education and Training, 2008) to ensure that teachers trained in this curriculum will have developed the capacity to put its requirements into practice. Consequently, teacher training institutions should improve both their curricula and their pedagogy. It is, however, regrettable that teacher trainers at the LCE do not seem to interrogate educational policies either with colleagues or with their student teachers, and are therefore not in a strong position to improve their curricula or their pedagogy.

Education in Lesotho has conventionally been following a separate-discipline approach at all levels. Only since 2013 has the Basic Education Curriculum (Grades 1 to 10; i.e. seven years of primary education and three years of junior-secondary education), based on an integrated approach through Learning Areas, been implemented. While this learning-area approach is

employed at the primary level, subject disciplines are still followed at the junior-secondary level. This poses challenges for teaching at both primary and secondary level, where teacher training still follows traditional disciplines with very limited integration within and between disciplines (Burke & Sugrue, 1994; Lefoka & Sebatane, 2003). This is despite the values embedded in multidisciplinary and cross-disciplinary learning. As a result, interactions of divergent cultures (Schweisfurth, 2011) within departments are limited. Schweisfurth (2011) views this as one of the perennial challenges to the implementation of new pedagogical approaches such as learner-centred education.

Education for sustainable development (ESD), also referred to as environmental education or environment and sustainability education, ‘mirrors the concern for education of high quality’, demonstrating characteristics of being:

- **Interdisciplinary and holistic:** learning for sustainable development embedded in the whole curriculum, not as a separate subject;
- **Values-driven:** sharing the values and principles underpinning sustainable development;
- **Focused on critical thinking and problem solving:** leading to confidence in addressing the dilemmas and challenges of sustainable development;
- **Multimethod:** words, art, drama, debate and experience employing different pedagogies for modelling different processes;
- **Participatory decision-making:** learners participate in decisions about how they are to learn;
- **Applicability:** learning experiences are integrated in day-to-day personal and professional life; and
- **Locally relevant:** addressing local as well as global issues, and using the language(s) which learners most commonly use (UNESCO, 2006a:4–5).

All lecturers in higher-education institutions need to engage in curriculum change processes that enhance educational quality and relevance (NEPAD, 2003). ‘Sustainable development is seen as a context for delivering existing aims of education and not as a competing priority’ (UNESCO, 2006b:35), since ESD employs different teaching and learning modes (Cotton, Warren, Maiboroda & Bailey, 2007).

While subject content knowledge, that is, Learning as Mastery, and democratic processes, that is, Learning as Participation (Lotz-Sisitka, 2011) are important, learning needs to be contextually situated in the learner’s sociocultural experiences for it to be meaningful (Smith, 2010). Learning as Connection (Lotz-Sisitka, 2011, see also Lotz-Sisitka, this edition) is also covered widely in educational policies in Lesotho and is a discourse that complements and fosters inclusivity. It further enriches the other two important conceptions of educational quality, since it brings the sociocultural, contextual and historical dynamics of the life worlds and experiences of learners into their own classrooms (Lotz-Sisitka, 2011). See Figure 1 on page 32 (Lotz-Sisitka, this edition).

Statement of the Problem and Objectives of the Study

This study sought to mitigate the culture of academic isolation which currently exists within the LCE departments. Its objectives were:

- To initiate interdepartmental collaboration among teacher trainers in order to share ideas and so improve the quality of education during initial teacher training; and
- To establish teacher trainers' levels of understanding of the concept of education for sustainable development and the extent to which they can integrate it in their courses to enhance quality.

Research Methodology

An ESD conceptualisation workshop was held to lay the groundwork for the study. The research focused on the three faculties of Education, Sciences, and Arts and Social Sciences where 10 teacher trainers were involved, including the researcher. Teacher trainers came from the following disciplines: 2 from Chemistry; 2 from Agriculture; 1 from Geography; 1 from Education; 1 from Technology Studies; 1 from Physics; 1 from Biology; and 1 from Sesotho. Participants were selected because they were already involved in one way or another in an activity relating to sustainable development, and also because of their willingness to participate in the study.

The participating teacher trainers were workshopped on the concept of education for sustainable development, including undertaking a trail walk for familiarisation with how nature might be used for teaching. A Sesotho metaphor, *Lehae la Rona* (The universe as our home) was used to initiate debate and elicit questions concerning participants' views regarding *our home* (Mokuku, 2010). In a planning meeting that followed, participants decided to co-teach pairs or groups of three trainee teachers using the same metaphor in their classes. Participants were later interviewed to ascertain their perceptions of ESD and of working by way of an interdisciplinary approach to teaching and learning.

Findings

These findings are drawn from the following areas within the study: environmental education (EE)/ESD conceptualisation workshop; *Lehae la Rona*; the concept of sustainable development; promoting sustainable development through courses; and collaboration with other departments.

Conceptualisation workshop

Learning as Connection

The Universe as 'our home' was introduced through a metaphor: *Lehae la Rona*. The use of this metaphor enabled participants to engage with the sociocultural, contextual and historical dynamics of their life experiences as they interrogated, and participated in discussions about, their current teaching and learning experiences. *Lehae la Rona* was thoroughly deliberated by

participants, giving rise to ideas about the notions of *strange* and *familiar* and how the two concepts are usually viewed, for example how do people usually approach a strange person, land or animal, or a strange concept as opposed to familiar ones? Participants as well as the students contended that *strange* is usually approached with scepticism, while the *familiar* is viewed as bringing hope and comfort. Participants discussed areas of collaboration with colleagues in different disciplines.

The two brief stories below provide examples of Learning as Connection:

In a supportive and friendly environment where everyone's opinion is accepted, learners discuss issues and discover problematic situations that might need attention. They decide together on ways of addressing such challenges and plan to undertake activities that relate to the subject content at hand. A group of physics students learn, in this way, about *electric current*. Using a waste plastic bottle, a mobile-phone battery and water, they connect to their contextual world of persistent floods and have designed an electric boat. Another group of students uses a mobile-phone battery to power a fan in order to cool air in the classroom. This encourages learners to solve problems relevant to their real-life situation while engaging in Learning as Mastery, and Learning as Participation discourses.

The metaphor itself sensitised participants and students to the need to care for and save resources, regardless of where they come from. A metal technology teacher mentioned that the metaphor raised issues of limited resources in his class, with the students deliberating on how they could save metal in their workshop so that they could continue to enjoy the use of such a resource. On a similar note, the chemistry teacher said that conservation of chemicals and minimising waste is top priority in chemistry lessons, since resources are finite. In all of these cases, we see a link between the course content and the sociocultural, historical and contextual experiences of learners.

Understanding the concept of sustainable development

The concept of sustainable development did not seem to be straightforward for most participants. Some described it on the basis of the literal meaning of the term 'sustainable'. When asked what they understood about sustainable development, one said: 'Mmm, sustainable development? To sustain is to have something for longer, so sustainable development is making sure that, while you use what you have, you will continue to have it for longer.' This description is in line with the Sesotho version of the term 'sustainable development' coined by the former Prime Minister of Lesotho, the Right Honourable Dr Pakalitha Mosisili, when he said that sustainable development is *Nišetsopele ea moshoelella*, meaning development that goes on and on. If the term is not adequately interrogated within the academic arena in order to arrive at a consensus understanding, it might be quite misleading. All participants gave examples of areas where sustainable development could be integrated into their courses. Concerns were centred on resource wastage, with examples ranging from energy (specifically electricity) to metal, chemicals, paper and water as needing immediate attention.

Promoting quality by integrating sustainable development into courses

Participants all agreed that sustainable development should be integrated in curricula, as it promotes learner-centred approaches. Student projects were viewed as important in order to

instil sustainability values in students, the argument being that, 'if they learn by doing, they will also be able to do the same when they teach'. Another one said: 'It is only when they do things that they [will] be able to solve problems in the communities where they live.'

Collaboration with other departments

Interdisciplinary collaboration was regarded highly by participants, particularly at the stage of curriculum review, as it can highlight areas of collaboration during teaching. The physics teacher pointed out that she would like to collaborate with the life skills teacher, arguing that her student teachers lacked assertiveness skills necessary for citizenry. Participants also suggested that the support of College management be sought so as to ensure the mainstreaming of ESD at the LCE. They said: 'This is the only way that could ensure that everyone does it'. They also saw a need for more capacity building, not just for the rest of the College's teacher trainers, but also for themselves, saying: 'We still need more training to be able to fully understand how to do it'.

In order to ensure curriculum integration, participants suggested thematic teaching using an environmental issue/theme as a means of interdisciplinary collaboration. They maintained that teaching around similar themes can instil values in students that might enhance a commitment to their institutional development (Cotton, Warren, Maiboroda & Bailey, 2007), as they share their learning experiences outside of their learning disciplines.

Trail walk – contextual learning

Participants appreciated experiential learning through a trail walk at the Lesotho Durhum Link. They saw it as a teaching method that brings the world near to the classroom in order to be experienced by learners in a 'real-world' situation. All of the participants alluded to the need to have a trail walk established at the College using an interdisciplinary approach so that different voices could be heard.

The limitations that discouraged participants from teaching by means of projects were: time; the large number of student teachers; overcrowding in classrooms; assessment demands limiting pedagogical approaches; and curriculum overload.

Conclusions

This short viewpoint paper has shown that teaching and learning approaches that embrace learners' contextual situations, and may also encourage learners to take actions that relate to their real-life situation, can potentially empower them to develop agency and become competent in confronting issues in the future, a point that was discussed among those involved in the project.

Following the interactions, it was found that teacher trainers at the LCE are positive about mainstreaming ESD as a vehicle for engaging in interdisciplinary collaboration so as to enhance quality education. Participants challenged students, requiring them to connect with their sociocultural, historical and daily experiences while they engaged with subject content knowledge. Participatory learning was enhanced through students' deliberations on issues of sustainable development.

Notes on the Contributor

'Mantoetse Jobo is a Lecturer in Agricultural Education at the Lesotho College of Education. She holds a master's degree in agronomy and farming systems (with strong emphasis on environmental education) and is pursuing a PhD in education for sustainable development. Her interests are natural resource management and interdisciplinary integration for teaching and learning. Email: mantoetse_ejobo@yahoo.co.uk.

References

- Burke, A. & Sugrue, C. (1994). Teaching and learning at national teacher training college: Institutional review undertaken on behalf of Higher Education for Cooperation Development under the auspices of the Primary Education Support Project, a Government of Ireland-funded project.
- Cotton, D.R.E., Warren, M.F., Maiboroda, O. & Bailey, I. (2007). Sustainable development, higher education and pedagogy: A study of lecturers' beliefs and attitudes. *Environmental Education Research*, 13(5), 579–597.
- Kingdom of Lesotho. (2007). *Education quality enhancement project (Education III)*.
- Lefoka, J.P. & Sebatane, E.M. (2003). *Initial primary teacher education in Lesotho: Multi-site Teacher Education Research Project (MUSTER) country report Tivo*. Sussex, United Kingdom: DFID.
- Lesotho Government. (2004a). *Lesotho vision 2020*.
- Lesotho Government. (2004b). *Poverty reduction strategy*.
- Lesotho Government. (2009). *Environmental education strategy towards 2014: A strategic plan for education for sustainable development in Lesotho*.
- Lotz-Sisitka, H. (2011). Conceptions of quality and 'Learning as Connection': Teaching for relevance: Paper presented at UNESCO EFA High Level Policy Meeting in Amman, Jordan.
- Ministry of Education and Training. (2005). *Education sector strategic plan: 2005–2015*.
- Ministry of Education and Training. (2008). *Curriculum and assessment policy framework: Education for individual and social development*.
- Mokuku, T. (2010). *Lehae la Rona* (The universe our home): A metaphor used at a conceptualization workshop for Lesotho College of Education teacher trainers at the Lesotho Durhum Link, March 2010.
- Mokuku, T., Jobo, M., Raselimo, M., Mathafeng, T. & Stark, K. (2005). Encountering paradigmatic tensions and shifts in environmental education. *Canadian Journal of Environmental Education*.
- NEPAD. (2003). *Nepad action plan on the environment*. UNEP.
- Schweisfurth, M. (2011). Learner-centred education in developing country contexts: From solution to problem? *International Journal of Educational Development*, 31, 425–432.
- Smith, G. (2010). Place-based education: Practice and impacts. Paper accepted for publication in the *International Handbook of Environmental Education Research* (in press).
- UNESCO. (United Nations Educational, Scientific and Cultural Organization). (2006a). Framework for the UNDESD International Implementation Scheme: United Nations Decade of Education for Sustainable Development.

UNESCO. (2006b). Globalization and education for sustainable development. Sustaining the future. Paper presented at the International Conference, Globalization and Education for Sustainable Development: Sustaining the Future, 28–29 June 2005, NAGOYA, Japan.