P**ractitioners' experiences of the implementation of sustainable development in the institutions of higher learning in Namibia**

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Abstract

The aim of this article reports results of the study that examined the experiences of the practitioners in Namibian Higher Education institutions on the implementation of Education for Sustainable Development. Although the article demonstrated that lecturers in the Namibian Higher Education Institutions view education for sustainable development as cross-cutting discipline that should be the responsibility of all lecturers, it seems that lecturers do not teach it collaboratively, as required by international bodies. The members of institutions' management should inspire and motivate the idea of sustainability and environmental awareness, and actively promote the transformation of society through the adoption of a policy and action plan on education for sustainable development.

Introduction

Since the Stockholm Conference on Human Environment in 1972, there has been a growing international interest in the role of higher education in fostering a sustainable future (Calder & Clugston, 2003). The role of higher education in fostering a sustainable future could be observed through a number of international Declarations. Haigh (2009) and Martin & Jucker (2009) list some of the declarations that have called on higher education institutions to foster a sustainable future. The declarations include the Tallores Declaration of 1990, which was issued at Tufts University European Centre, France which argued that, in creating an equitable and sustainable future, universities have a major role in the education, research policy formation and information exchange. The Halifax Declaration in 1991 which emerged from the conference on University Action for Sustainable Development at Dalhousie University, urged higher education institutions to place more emphasis in interdisciplinary teaching of sustainable development. The Swansea Declaration of 1993 released by the Association of Commonwealth Universities and the Kyoto Declaration on Sustainable Development in 1993, by the International Association of Universities urged Higher education institution to disseminate a clear message of understanding sustainable development and respect the obligations of sustainable development: to meet the needs of the current generation without compromising the ability of future generation to meet their needs. Moreover, the Cooperation Programme in Europe for Research on Nature and Industry through Coordinated University Studies (COPERNICUS) in 1993, which originated at Bologna and the *Magna Carta* of

European universities, charged universities to propagate environmental literacy and promote the practice on environmental ethics in society.

As a response to the above recommendations, the Namibian Higher Education Institutions have made efforts to implement courses that are perceived as ESD or supporting its goals. For example, the Polytechnic of Namibia (PoN) introduced certificate level courses in EE while the Department of Natural Resources and the Department of Health Sciences at PoN have implemented environmental related courses in their programmes. The University of Namibia's (UNAM) Faculty of Education (FoE) has introduced EE modules in the B. Ed Lower Primary and in the B. Ed Adult Education (Faculty of Education, 2011). Other courses in the Faculties of Science and Law, as well as department of Geography and Environmental Study, in Namibian higher education institution are believed to be carriers of ESD subject matter. However, the Outputs of the First National Consultative Seminar on Education for Sustainable Development in Namibia (Government of the Republic of Namibia, 2008, p. 8), shows that one serious challenge "has to do with meaning and interpretation of the concept and practice of ESD and its linkages to other initiatives in education and development". This finding influenced the researchers to assume that practitioners' lack of understanding of the ESD concept limits the successful implementation of ESD programmes. The aim of this study was to assess the practitioners' experience of the implementation of ESD in Namibian higher education institutions.

Statement of the problem

Since the Rio Earth Summit in 1992 political commitments show that ESD has gained a higher profile within higher education over the last 2 decades (Cotton, Bailey, Warren & Bissell, 2009). However, in the Namibian higher education ESD is a concept that seems to be struggling to take off the ground and be implemented in accordance with the global thinking and recommendations. What this study sought was to clarify how lecturers who are expected to implement ESD in Namibian's HEIs experience the implementation of ESD concept. The following research question was addressed:

- How is the implementation of ESD concept experienced in Namibian higher education institutions?

Conceptual framework

The key concept that formed the foundation of this study was education for sustainable development (ESD). The United Nations General Assembly (2002) states that ESD is the education that encourages changes in behaviour and creates a more sustainable future in terms of environmental integrity, economic viability, and a just society for present and future generations. This definition shows that ESD does not only engender knowledge and awareness but also action, because

behavior change is threefold in that it addresses the cognitive, emotional and action of the human being.

The study of the practitioners' experiences of the implementation of ESD in Namibian HEIs was informed by the ecosystem theory. The notion of the eco-systemic perspective shows that a person is inseparable from his/her environment. Ecosystems are social and ecological, and as such explore the relationship between people and the natural environment. Through the eco-system perspective, a person is inseparable from his/her environment and the environment can explain his/her behaviour (Hamunyela, 2008, p. 31). The eco-system theory promotes the linkages between environment, development and education. It is therefore important to emphasize the contribution of human learning to the natural environment for sustainable development (Donald, Lazarus & Lolwana, 2002).

The relevance of the eco-systems theory in this study was the recognition that the curriculum, educators, students and environment are interdependent systems. Environment influences educators' teaching, learners' learning and success of the institution. The relationship between these systems is vital to the implementation of ESD in order to build a sound base for protecting Namibia's natural systems. The theory guides the research as it sought to investigate how lecturers in the institutions of higher learning in Namibia experience the integration between curricula and the environmentally related issues through the implementation of ESD.

Significance of the study

This study is significant for educators and policy makers in Namibia. This study might enlighten educational practitioners and policy makers in Namibia what ESD entails and ensures successful implementation of ESD in HEIs.

Methodology

This study employed both the quantitative research methodology as it sought "numerical data" while qualitative research methodology seeks "non-numerical data" (Walsh, 2001, p. 7). The population of the study included all the lecturers at the University of Namibia (UNAM), Polytechnic of Namibia (PoN), and International University of Management (IUM). The whole population of lecturers in the three institutions of higher learning in Namibia was regarded a sufficient size to achieve acceptable population validity. The researchers distributed more than 100 questionnaires to lecturers who agreed to participate in the study in all three institutions. Fifty one (51) completed questionnaires (in total) were received from all institutions.

The Microsoft Excel was used to generate the graphs, tables and charts from the collected quantitative data. The descriptive statistics included tallying of frequencies in the calculation of percentages (Hamunyela, 2008).

There were some two major limitations affecting this study. First, this study did not include the students' views because it focused on the input (lecturers' practice of ESD) required, producing a desired output (students' understanding). The other limitation was the availability of lecturers. Due to their busy schedule, the lecturers were not willing to take part in the study. Others did not complete the questionnaires as requested resulting in very low questionnaire return, even after being assured of anonymity.

Presentation of results

Demographic information of the participants

The respondents were all lecturers at the three HEIs in Namibia offering different qualifications including Diplomas, further diplomas, and undergraduate and post graduate degree qualifications.

The distribution of the participants by gender is given in Figure 1 below:

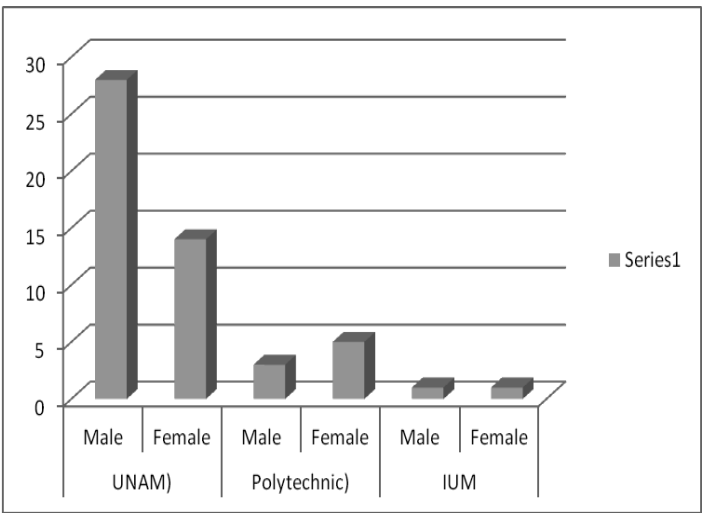

Fig. 1: Participants gender by institution

As can be seen in Fig 1, the majority (56%) of the respondents were male as compared to 44% females. Nonetheless, the numbers of males versus females varied from institution to institution with UNAM having a much larger number of males as compared to females.

The respondents were asked to indicate the Department in which they work. The results are given in Figure 2 below:

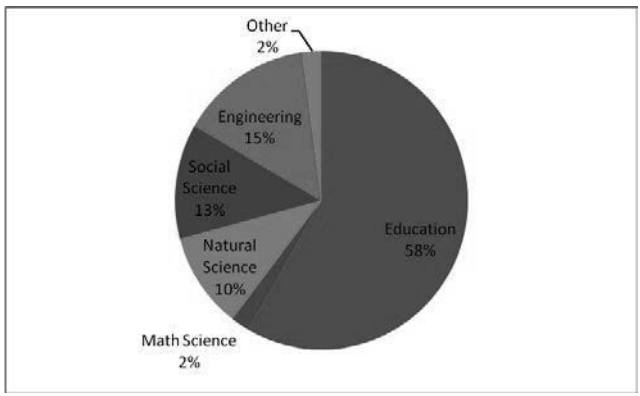

Fig. 2: Classification of respondents by Department

As can be seen from Fig. 2, the majority of the respondents were lecturers in the Faculty of Education accounting for 55% of the total respondents followed by the Engineering lecturers who accounted for 14%.

The respondents were asked to indicate whether they actually taught ESD concepts in their courses. The results are given in Table 1 below:

Table 1: Teaching of ESD concepts by the respondents (N = 51)

Response	Frequency		Totals
	Males	Females	
Yes	14	15	29
No	12	4	16
Not sure	5	1	6
Totals	**31**	**20**	**51**

Table 1 displays that the majority (57%) of the respondents indicated that they taught ESD concepts in their courses while 31% indicated that they did not. A few (12%) of the respondents were not sure whether they did.

Participants were further asked to explain how they taught ESD concept in their courses. Forty nine respondents indicated how they taught ESD concepts in their courses or subjects. Their responses are indicated in Figure 3 below:

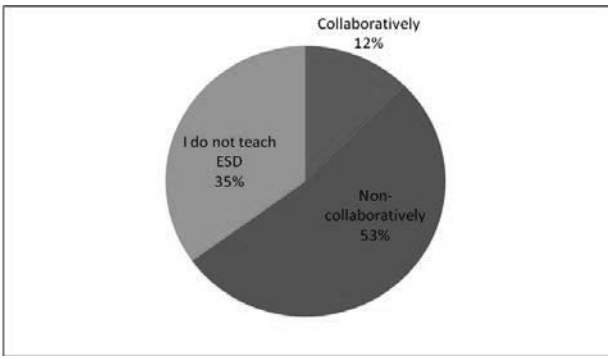

Fig. 3: How ESD is taught in HEIs

From Fig. 3 it is clear that where ESD was taught is was taught non-collaboratively as indicated by 53% of the respondents. Only 12% of the respondents indicated that ESD concepts were taught collaboratively. It is interesting to note that a relatively large number (35%) of respondents indicated that they did not teach ESD concepts at all.

Reasons why ESD is not taught in the courses

Some of the reasons given by those respondents who did not teach ESD concepts in their courses are given in Figure 4 below:

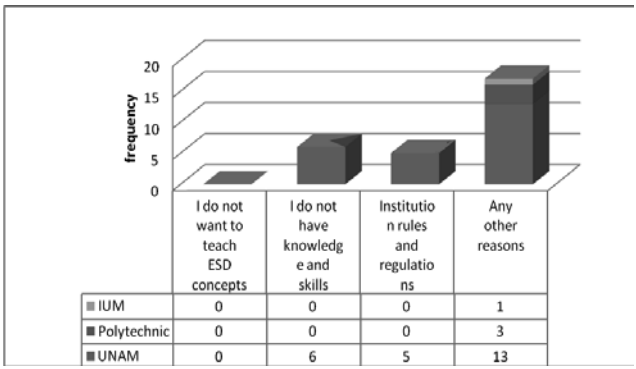

Fig. 4: Reasons for not teaching ESD concepts by lecturers

As shown in Figure 7 the respondents gave *"Any other reason"* for not teaching ESD in their courses. Some of the reasons given were: *"my field is not related to ESD"*, *"Not part of my course"*. *"My subject does not contain such information"*, *"Never communicated to me"* among others. As can be seen in their responses the courses taught by these respondents appear to be standalone ones and do not have ESD concepts integrated in them. Accordingly ESD concepts are not taught in these courses.

Further, the comment *"my field is not related to ESD"* or *"Not part of my course",* are interesting in the sense that the respondents failed to see that whatever action we take in life has in one way or another an impact on our environment and as such we should be agents of change. Ensuring that we include aspects related to the sustainability of our environment (ESD) in our courses is one way of doing so. Further, it is one way of getting the information on sustainability of our environment to the larger community.

Discussions and implications

Lecturers in HEIs in Namibia understood ESD as a cross-cutting discipline that should be the responsibility of all lecturers. This is contrary to the view held by the university groups referred to by Reid, & Petocz (2006, p. 108) that "sustainability is the domain of environmental educators…" The lectures are key players in the implementation of ESD in subject disciplines, since understanding is one essential and necessary ingredient to implementing ESD in Namibia's HEIs. Understanding is essential because it builds the will to action necessary to energize the lecturers to implement ESD as a cross cutting issue in education.

Although the lecturers in HEIs understood ESD as a cross-cutting discipline that should be the responsibility of all lecturers, it seems that they do not teach it collaboratively. This result seems to imply that the implementation of ESD in HEIs in Namibia is discipline based in that subject groups do not work together in the teaching process. Dale, & Newman (2006) state that issues that are driven by the interaction of human society and ecosystems are complex and have multiple linkages and are not suited to disciplinary analysis. ESD explores the interaction between the human society and environment. Therefore, collaborative teaching methods are desired in the teaching of ESD because they help to address complex human problems that need the contribution of everyone in the education area. In addition, collaborative teaching also "build bridges" between the subjects disciplines in the implementation of ESD in HEIs in Namibia.

Higher education institutions in Namibia should be assisted to think in terms of the eco-systems theory because it helps to "build bridges" between courses taught by lecturers in one department and other department(s). It seems that the members of management in HEIs need to be convinced to support the implementation of ESD. The members of management should acknowledge that our current situation is not sustainable and the HEIs should be at the cutting edge of the new order in spreading the message that the pattern of our current development is undermining the developmental and environmental needs of the present and future generations. Nicolaides (2006) asserts that the members of management should inspire and motivate the idea of sustainability and environmental awareness and actively seek the transformation of society. A HEI that follows an environmentally friendly path will enhance its public image and attract and retain committed employees. Its competitive position will be greatly improved as it is seen to actually care. It will also reduce its consumption and thus save money (Nicolaides, 2006). We suggest that the adoption of a policy on education for sustainable development is one of the first steps by which members of management in HEIs could support ESD. Further, the ESD policy should be transformed into an action plan, in which the roles of various Faculties, department and the lecturers in higher education are clearly spelt out. Once the ESD policy and action plan for HEIs has been drawn, it then should be used as an extension of training of lecturers and researchers. It is through the workings of various lecturers in various departments that the real solution to environmental issues could be found in Namibia.

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