

INTEGRATING EDUCATION FOR SUSTAINABLE DEVELOPMENT IN TVET PARTNERSHIP FOR NATIONAL DEVELOPMENT

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Abstract

TVET is widely recognized as a vital driving force for the socio-economic growth and technological development of nations. Education for Sustainable Development (ESD) in Technical and Vocational Education and Training (TVET) partnership has a prime role for National Development. Therefore, the research explored the integration of Education for Sustainable Development (ESD) in TVET Partnership for National Development. Relevant reviews of literatures were done in: an overview of ESD as a policy; ESD as a frame of mind; concept of TVET; nuggets of TVET partnership; and integration of ESD agenda in TVET partnership for national Development. It was deduced from the reviewed literatures that national development is not a fixed concept; rather it is a culturally-directed search for a dynamic balance in the relationships between social, economic and natural systems, which EDS in TVET partnership can achieve. Amongst others, it was recommended that the government, TVET stakeholders, educational administrators, policy makers and TVET providers in Nigeria should ensure Education for Sustainable Development (ESD) is fully integrated in TVET programmes for easy of national development in the Nigerian economy.

Keywords: Education for Sustainable Development (ESD), TVET Partnership & National Development

Introduction

As governments, industry, NGO's and the general public become more aware of the urgency of sustainable development, a vital role for education in learning and teaching towards sustainability become more evident. This urgency has been reflected in the aim of the United Nations Decade of Education for Sustainable Development, (ESD) 2005–2014 launched by UNESCO on 1 March 2005. This initiative seeks to 'integrate the values inherent in sustainable development into all aspects of learning to encourage changes in behaviour that allow for a more sustainable and just society for all' (UNESCO, 2005).

Different local and global initiatives in education, such as the inclusion of Education for Sustainable Development (ESD) in the

reform of curricula and teaching programmes at different levels, indicate an increasing commitment towards an ESD agenda in education. In addressing these issues at the Technical Vocational Education and Training (TVET) level, UNESCO-UNEVOC International Centre in Bonn has been proactive and is playing a significant role. Technical Vocational Education and Training (TVET) is widely recognized as a vital driving force for the socio-economic growth and technological development of nations; and TVET is increasingly recognized as the bedrock of every national development (Afeti, 2010).

A number of experts meetings, consultations, conferences and publications have been initiated by the International Centre on TVET to forward the Education for Sustainable Development agenda. Among the major events

are the UNESCO International Experts meeting in October 2004 on Learning for Work, Citizenship and Sustainability hosted by the UNESCO-UNEVOC International Centre in Bonn focused on the relationships between TVET and the sustainability of the economy, the environment and society. Four days of discussions led to the Bonn declaration that highlighted the need to: “modernize TVET and ensure its enhanced status and sustainability”. The participants asked, that: “particular priority be given to TVET initiatives that: alleviate poverty; promote equity, especially in relation to gender; arrest the spread of the HIV/AIDS pandemic; support youth in crisis; support rural communities and people in excluded groups; encourage north-south cooperation and assist the development of countries in transition and those in and emerging from crises and conflict. These TVET initiatives are pivotal to human-centered sustainable development” (Pavlova, 2007).

Generally, education in Nigeria has been perceived as an instrument “per excellence” for effecting national development (FRN, 2013). Government has stated that for the benefit of all citizens, the country’s educational goals shall be clearly set out in terms of their relevance to the needs of the individuals and those of the society, in consonance with the realities of our environment and the modern world. Hence, it becomes necessary to integrate Education for Sustainable Development (EDS) in TVET partnership for national development, in Nigeria as an economy.

Statement of the Problem

The era of globalization, in which various sectors no longer appear to contain national boundaries presents all nations with distinct dichotomies in the labour market. On the one hand, globalization produces a wider occupational spectrum providing individuals with broader opportunities for selecting jobs. On the other hand, the competition has become fierce in acquiring appropriate job opportunities. Such competition necessitates job seekers to radically improve upon their

qualifications. Moreover, qualifications already attained require continuous updating for their knowledge and abilities to keep pace with the demand of the labour market. Such demands pose a huge challenge to education, in establishing an education system capable of meeting the needs of the labour market and subsequently bring about national development (Kurnia, 2013).

Of the sectors of education that could provide solutions to the above-mentioned problems, Education for Sustainable Development (ESD) in technical and vocational education and training (TVET) partnership has a prime role. In many developing countries TVET has become of vital national significance for its value in: (1) preparing the younger generation to enter working life and (2) responding to the ineluctable demand of the development process, to provide the nation with a quality work force that will speed the national development of a nation like Nigeria; these led the study to explore how EDS can be incorporated into TVET for national development.

An Overview of ESD as a Policy: ESD as a Frame of Mind

ESD is conceptualized as a policy and as a frame of mind and through what is known as a technical fix -value change approach. Olssen and Peters (2005) argued that: education policy must be contextualized both nationally and globally as a transformative discourse that can have real social effects in response to contemporary crises of survival and sustainability. ESD policy formulation within the TVET system requires improvements within its elements such as: qualification standards and specialization; articulation with general education; assessment and certification for achievements; methods of curriculum development; governance; labour market analysis; financing; legislation, access and admission; provision of training places; special target groups; institutional arrangements for delivery; information and guidance; or improvements in the system as a whole which

is known as a *systematic reform*. Systematic reform is built upon the assumption that changing most or all elements of the system is more likely to lead to TVET improvement in relation to ESD.

Benedict (1999) developed a model of a systematic approach to sustainable environmental education. Benedict proposed that for change to occur teaching as an activity should take place in a multilevel system: teacher-student level, classroom level, school level, school system level, political level and outside world level. Benedict argued that

“If we are to enable pupils to address the issues raised by sustainable development rather than preoccupy them with what are essentially symptoms masquerading as causes, we must engage them in those kinds of enquiry which reveal the underlying dominant motives that are in play in society; motives which are inherent in our most fundamental ways of thinking about ourselves and the world. That such a metaphysical investigation will be discomforting for many seems unavoidable, but it promises to be more productive in the long term than proceeding on the basis of easy assumptions about the goals of sustainable development as though it were a policy whose chief problems are of implementation rather than meaning”.

Concept of TVET

According to UNESCO, TVET comprises formal, non-formal, and informal learning for the world of work. Young people, women, and men acquire knowledge and skills from basic to advanced levels across a wide range of institutional and work settings and in diverse socioeconomic contexts. The International Centre for Technical Vocational Education and Training's definition of TVET adds to the UNESCO definition by referring to a range of learning experiences that may occur in a variety of learning contexts, including educational institutions and work places that are relevant to the world of work. The UNESCO-UNEVOC (2008) definition, states that TVET is the acquisition of knowledge and skills for the world of work to increase opportunities for productive work, sustainable livelihoods, personal empowerment and socioeconomic development for both women and men, in both urban and rural communities'. In the European Union (EU), the most commonly used term is

teachers should consciously act at a range of levels, putting their efforts into a broad perspective. The same argument fits well within the TVET context. However, as argued by Huckle, (2005) in Pavlova, (2007) ESD as a policy is not enough to achieve substantial change. Huckle made a distinction between two broad trends – (a) ESD as policy, and (b) ESD as a frame of mind and argued that it is extremely important to develop a particular mind set to be ready to behave in a particular way. Huckle (2005) in Pavlova, (2007) based his position on Bonnett's ideas (2002:7):

‘Vocational Education Training (VET)’ which refers to education and training aiming to equip people with knowledge, skills and/or competences required for particular occupations or the labour market in a broader sense. TVET programmes are generally designed to prepare learners for direct entry into a particular occupation or trade and usually lead to a labour market vocational qualification that is recognized by relevant authorities (UNESCO-UNEVOC, 2010).

TVET is defined by Mar (2011) as a comprehensive term referring to those aspects of the educational process involving, in addition to general education:

- the study of technologies and related sciences;
- As well as the acquisition of practical skills, attitudes, understanding, knowledge relating to occupations in various sectors of economic and social life.

TVET is to be understood as:

- an integral part of general education;

- a means of preparing for occupational fields and for effective participation in the world of work;
- an aspect of lifelong learning and a preparation for responsible citizenship;
- an instrument for promoting environmentally sound sustainable Development;
- A method of facilitating poverty alleviation.

As recorded by UNESCO International Centre for Technical and Vocational Education and Training, UNESCO-UNEVOC, Technical and Vocational Education and Training (TVET) is concerned with the acquisition of knowledge and skills for the world of work. TVET is an incredibly diverse sub-sector of education and training. It comprises formal, non-formal and informal learning. It develops skills and knowledge from basic to advanced levels, and shapes people's attitudes. It takes place across a wide range of institutional settings, including schools, public and private vocational institutes, tertiary education institutions, community projects, at home and the workplace, in both the formal and informal economies. At its best, TVET enhances skills for working, further learning and living, and for contributing to human, economic, social and environmental aspects of development.

TVET thus equips people not only with vocational skills, but with a broad range of knowledge, skills and attitudes that are now recognized as indispensable for meaningful participation in work and life. Examples of the benefits include self-awareness and self-esteem, and strengthened interpersonal, citizenship, communication and entrepreneurial skills. Much of TVET also reaffirms the value of traditional knowledge and skills, as well as of knowledge and skills acquired outside formal settings. The complexity of TVET does not end here, however, as it is essentially experienced throughout the course of a person's life. Throughout the course of history, various

terms have been used to describe elements of the field that are now conceived as comprising TVET. These include: Apprenticeship Training, Vocational Education, Technical-Vocational Education (TVE), Vocational Education and Training (VET), Workplace Education (WE), and Lifelong learning (LLL). Several of these terms are commonly used in specific geographic areas (UNESCO, 2005).

According to FRN (2013) National Policy on Education, technical and vocational education is used as a comprehensive term referring to those aspects of the educational process involving in addition to general education, the study of technologies and related sciences and the acquisition of practical skills, attitude, understanding and knowledge relating to occupations in various sectors of economic and social life. Technical and Vocational Education is further understood to be:

- An integral part of general education
- A means of preparing for occupational fields and for effective participation in the world of work
- An aspect of lifelong learning a preparation for responsible citizenship
- An instrument for promoting environmental sound sustainable development
- A method of alleviating poverty

Nuggets of TVET Partnership

The UNESCO-UNEVOC International Centre has been proactive in working towards the ideals of ESD. A number of important activities have been initiated and organized by the UNEVOC on TVET partnership. Some examples of activities include:

- Consultative Meeting: Engaging the Private Sector, Bonn, Germany, 23-25 May 2007
- Towards Sustainable Global Health, Bonn, Germany, 9-11 May 2007
- TVET for All - a Master Key for Sustainable Development?- Roundtable at the 10th International APEID Conference, Bangkok, Thailand, 6-8 December 2006

- Needs Analysis for Training, Capacity Building and Skills Development in the Water and Sanitation Sector in Vietnam, Ha Long, Vietnam, 3-5 December 2006
- TVET for Sustainable Development - Opportunities and Challenges, Ho Chi Minh City, Vietnam, 2-5 July 2006
- TVET for Sustainable Development - Arab States Regional Workshop, Bahrain, September 2005
- Integrating Sustainable Development Issues into TVET: Poverty Alleviation and Skills for Employability, Citizenship and Conservation in Asia and the Pacific, Bangkok, August 2005
- UNESCO International Experts Meeting Learning for Work, Citizenship and Sustainability, Bonn, October 2004
- UNEVOC Network Meeting on TVET for Sustainable Development, Bonn, October 2004 (Pavlova, 2007)

Integration of ESD Agenda in TVET Partnership for National Development

ESD agenda on TVET content is happening in two ways: through existing programmes and through establishing of the new ones. When developing new content for TVET existing programmes, courses can be shaped to address national development issues and concerns by including new concepts, new processes and new teaching strategies. Introduction of new concepts, processes and the implementation of new teaching strategies would depend on the type of skills being required for particular countries.

Estevez-Abe, Iversen and Soskice's (2001) in Pavlova (2007) distinguished three types of skills: firm-specific (Japan, Korea), industry-specific (Germany) and general skills. In any economy vis-à-vis Nigeria, the three types of skills can be utilized. However, in some structured economies the production of one of these skills types will predominate over the others. **Firm-specific skills** are the least portable, **industry-specific skills** are portable within industry, while **general skills** can be applied across a range of firms and industries.

Each type requires different types of training and assumes particular kinds of economic development strategies. As argued by Lauder, Brown and Ashton (2006) in Pavlova (2007), for firm-specific skills a high level of general education is desirable. This is then used as the foundation for the in-house development of skills that firms demand. Industry-specific skills require some interaction between the education and training system and industry for the training to be appropriate and up to date in supplying the skills required. For general skills, education at only a minimum level is required for the lower end of the flexible labour market. Thus it is possible to suggest that different approaches towards content development would be used for firm-specific, industry-based and general skills.

In firm specific, Countries around the globe are developing schemes on how to include ESD in the general education, the one that is required for firm-specific training. Some examples presented by Maclean (2007) in Pavlova (2007), in his keynote address at the 12th International Business Forum 2007, Business and the Millennium Development Goals in Washington are: **Toyota** provides an example of training along the supply chain in the more economically developed world in that Toyota collaborates with the Coordinating Committee for Automotive Repair (CCAR) to host a website called CCAR-Green Link.

Industry-specific skills, every occupational activity (manufacturing, maintenance, service) uses resources in natural form (water, minerals, etc) and in processed form (materials, objects, electricity, etc). Thus every occupation directly related to sustainable development in terms of the environmental component. Defining goals for ESD integration in TVET learning is an important step in addressing National Development (ND) through training. There should be a clear link between occupation-specific skills and ND concepts and practices. In terms of economic component, the use of environmentally-friendly materials, low energy consumption, environmentally clean and

sustainable processes, intelligent transport and logistics procedures and a waste management concept geared to waste avoidance can lead to a reduction in cost and, in the longer term, to an increase in corporate competitiveness (Pavlova, 2007).

General skills: As general skills can be applied across a range of firms and industries, a general understanding of what ND is and how each of us can contribute towards it in the everyday life and the workplace situation, is important and can be addressed through any type of education or training. The economy is tailored to work within this ecosystem's capacity. The needs of communities to develop and maintain eco-efficient and sustainable technologies or ways of doing things have to work within the limits of natural ecosystems. ND can be seen as change for the better in which social, cultural and economic needs are met without plundering non-renewable resources or threatening eco- systems (Pavlova, 2007).

Conclusions

National development is not a fixed concept, rather it is a culturally-directed search for a dynamic balance in the relationships between social, economic and natural systems – a balance that seeks to promote equity between the present and the future, the equity between countries, races, social classes and genders. TVET is widely recognized as a vital driving force for the socio-economic growth and technological development of nations. Education for Sustainable Development (ESD) in Technical and Vocational Education and Training (TVET) partnership has a prime role for National Development. Hence, the study delved into the integration of Education for Sustainable Development (ESD) in TVET Partnership for National Development.

Recommendations

In light of the study on integration of Education for Sustainable Development (ESD) in TVET Partnership for National Development, the following recommendations are made:

1. TVET must be adaptive and responsive to the changes in demands, whether these are economically, socially, technologically, academically or politically generated. When there is a growing attention to these changing demands, TVET will ever remain vibrant and relevant in all ages and environments.
2. The government, TVET stakeholders, educational administrators, policy makers and TVET providers in Nigeria should ensure Education for Sustainable Development (ESD) is fully integrated in TVET programmes for easy of national development in the Nigerian economy.
3. A demand-driven TVET system, which is relevant to the needs of the production sector cannot be self-referential and conservative. To respond to the challenges of globalization, technology, demographic changes and sustainable development as well as to overcome skills mismatches and shortages, TVET should commission programmes that include components that anticipate and build competencies for future needs with the development of new curricula linked to the tertiary sector and new technologies.

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