



EDUCATION FOR SUSTAINABLE DEVELOPMENT: SUGGESTIVE CHANGES IN SCHOOL CURRICULUM

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Abstract

Education encompasses teaching and learning specific skills, imparting of knowledge, positive judgement and well-developed wisdom. Education for Sustainable Development (ESD) has five components; knowledge, skills, perspectives, values and teaching issues which are to be addressed in a formal curriculum for sustainable development. The present paper discusses in detail the infusion approach to infuse ESD in to the curriculum. This mean to integrate, to weave into the existing curriculum the knowledge perspectives values, skills/actions needed to transform society and to sustain the planet.

Key words: *Education, sustainable development, ESD (Education for sustainable development), school curriculum, comprehensive approach, infusion approach.*

Introduction

Education encompasses teaching and learning specific skills, imparting of knowledge, positive judgement and well developed wisdom. It has one its fundamental aspects of imparting culture from generation to generation. It is an application of pedagogy, a body of theoretical and applied research related to teaching and learning. The basic aim of the education system for sustainable development is 'education for a new man'. 'a man of Cosmo-planetary consciousness with a holistic world outlook, who has a culture of sustainability, high socio-cultural needs and deep moral ethical values, who is capable to solve global tasks facing by the mankind and to promote the forming of sustainable society.

Education in its contemporary development should be aimed at the future, should "foresee" and form in a certain way and satisfy needs of future generations of people. That means that education should be anticipatory to social, economic and cultural life, it should form desirable sustainable future. But such ideas could not be realized in old organizational forms of education system.

We need new organizational forms and educational institutions mobile, synergetic, creative, future-oriented which could provide the implementation of new objectives and new historical functions of education. For that it is necessary that all spheres of life of society be incorporated whenever possible upon the principles of sustainable development and improving the capacity of people to address environment and ethical awareness, values and attitudes, skills and behaviour consistent with sustainable development and for effective public participation in decision making" (Chapter 36 of Agenda 21, Rio Declaration 1992).

Need For Sustainable Development

Sustainable development is a complex concept with its origin in the natural and social Sciences that has been developed through international dialogue in response to the challenges facing the world today. According to Brundland Commission (1987), Sustainable Development is "development which meets the needs of the present without compromising the ability of future generations to meet their own needs."

A core principle behind sustainable development is the idea that economic,

social and environmental conditions play a major role. ESD has five components; knowledge, skills, perspective, values and teaching issues which are to be addressed in a formal curriculum for sustainable development.

The Johannesburg World Summit on Sustainable development (WSSD, 2000), proposed the Decade of Education for Sustainable Development (DESD). It considers the year 2005-2014 as the United Nations Decade for Education for Sustainable Development (UNDESD). The basic vision of the DESD is a world where everyone has the opportunity to benefit from education and learn the values, behaviour and life styles required for a sustainable future and for positive societal transformation. There is no universal model of education for sustainable development. While there will be overall agreement on the concept; there will be nuance differences according to local contexts, priorities and approaches. Each country has to define its own priorities and actions.

If government officials or school district administrations are unaware of the linkage between Education and Sustainable Development, re-orienting education to attain sustainable development will not occur. When people realize that education can improve the likelihood of implementing national policies, regional land and resource management programs, then education is in a position to be reoriented to help achieve sustainability. This awareness forms the first step in the reorienting process. Thus the importance of ESD must reach beyond the delegations and permeate the educational community and general public.

Since ESD involves a comprehensive approach to educational reform, it should extend beyond the boundaries of individual school subjects and requires the attention of teachers, educational administrators, planners and curriculum agencies. Integrating the objectives, concepts and learning experiences of education for a sustainable future into syllabuses and teaching

programmes is an important part of such reform, indeed: “A basic premise of education for sustainability is that just as there is a wholeness and interdependence to life in all its forms, so must there be a unity and wholeness to efforts to understand it and ensure its continuation. This calls for both interdisciplinary inquiry and action. It does not, of course, imply an end to work within traditional disciplines. A disciplinary focus is often helpful, even necessary, in allowing the depth of inquiry needed for major breakthroughs and discoveries”.

Inclusion of material and experience to develop a conceptual understanding of the phenomenon of change and the problems related to sustainable development and to develop minds that cope with change and reasonable techniques for doing so is required. Content and outcomes needs to be in tune with the social and cultural realities of the times. Orientation to cultural and social realities also involves value bearing concepts and experiences which encourage examination of value and value conflicts. Hence ESD should be incorporated in the entire curriculum starting from pre-schooling to higher education which should be transacted in a meaningful manner.

Infusion approach

To infuse Education for Sustainable Development (ESD) into the curriculum means to integrate to weave into the existing curriculum, the knowledge, perspectives values, skilly/actions needed to transform society and to sustain the planet.

Knowledge –

Knowledge about sustainable development, that is, knowledge about the environment, economics and society. Students need to learn how human activity affects the environment, what changes are taking place in the environment (e.g.- climate change), what can be done to stop, adopt to or reduce the impact of these changes. Students also need to understand the connections between what happens in the physical environment and what happens in the

society (economically, socially, and culturally). Students also need to become aware of the many issues associated with creating a sustainable world. These include issues related to peace, justice, the reduction of poverty, environmental stewardship, the protection of animal and plant species'

Perspectives-

It is important to develop a 'sustainable development perspective' Students need to be encouraged to critically analyse beliefs and actions from the viewpoint of how sustainable they are and of how beneficial they are to society (both local and global) as a whole.

Values-

At the core of creating a sustainable society is the creation of values such as respect and care for self, others and the planet. Such values have to be nurtured, taught and examined

Skills/Actions-

Students need to be enabled to act in accordance with the values and perspectives of sustainable development. This means preparing students to address the needs in their community, their society by providing them with the tools and opportunity to do so.

To some extent all curriculum includes some aspects of these. Therefore, there is a need to audit the syllabus of different subjects to see and find out what gaps and emphases are missing.

Few questions may be-

1. How much knowledge about the physical environment is required in a language, social science and science curriculum
2. Does the language, social science and science curriculum include the examination of and the development of perspectives and values that will create a just and equitable society, a society that is sustainable.
3. To what extent are students encouraged in the School Curriculum to be aware of the connections between the physical social, cultural, political, and economic aspects of society.

Using the infusion approach:

The infusion approach allows the teachers to address sustainability, not by adding another course, but through the teaching of our subject area. Teachers have to find out the sustainability topics that will complement or extend in meaningful ways that exists in their curriculum.

Infusing education for sustainable Development into Literature

For this the objectives may be summarized as helping students to understand themselves and others and their relation to the wider natural and social environment. Such an understanding will serve as a basis for building respect for self, others and the earth. Students should learn to think critically about and understand major environmental, social and economic issues and act to create a world where people enjoy a better, safer and a just world.

Specific objectives in teaching of literature for ESD include

1. to develop students knowledge and awareness of the physical environment (e.g. Climate change, global warming, biodiversity).
2. To help students care for the physical environment.
3. To help students understand the relation between the physical and social environment
4. To develop students knowledge and understanding of society (Key social issues such as justice, equity, peace, poverty eradication)
5. To encourage students to care for and respect others.
6. To help students identify strategies and take action to address environmental, social and economic problems.

As literature makes special contribution to the curriculum, it can be used to further the goal of sustainable society. Literature builds empathy, through literature we learn how to "Walk in another's shoes", see the world from another person's perspective and how to feel how others feel. Literature provides a space in which every individual become the 'other' for a while. Literature also focuses on moral and ethical issues, attitudes and values.

To infuse ESD into literature, teacher should match literature objectives with

ESD objectives and plan general strategies for teaching literature with an ESD focus. To make it happen, the teacher has to explore the term 'sustainable development' with the students and discuss the various reason for including an ESD focus in literature. In the Introductory, development and concluding / Reflective activities teacher has to teach with clear ESD focus. Students must be provided opportunities to learn about and engage in transformation of community by planning and carrying out community action project related to lessons.

Infusion approach in social studies curriculum.

Barth (1993:57) submits, as a basic belief of Social studies, that "... the proper content of the Social Studies is the persistent and contemporary social....conflicts,issues and problems..." that affect society Most writers in Social Studies also argue that the subject is underpinned by a commitment to social and individual development and improvement. This goal, it is argued, can perhaps best be achieved through preparing our young people to examine real and existing social problems,issue and events, with a view to understanding them and examining possible solutions.

Knowledge of the nature of our society and the functioning of our social institutions is clearly important. Yet, perhaps more important than this knowledge is a range of skills and competencies that are required to enable our students to become competent,caring and responsible citizens and decision-makers. These skills equip students for the process of social inquiry which involves the major activities of:

Investigating (an issue or problem), Deliberating (on causes, points of View,etc), Problem-solving (proposing a solution), Serving (a community need), Acting (on a solution), and Reflecting (on the action taken).

Brophy & Alleman (1994 & 1998) argue that the social concerns and issue that are of significance exist in the community,outside of the classroom; and

they also note that students can best study and investigate these issues in their real-life setting. This also allows students to observe first-hand the impact of these issues on the community. Such learning activities will then be truly authentic in terms of the study of real-life situations and the application of what is learned in class to life, events, issue and concerns beyond the classroom. As further noted in the UNESCO's "Teaching and Learning for a Sustainable Future "(2002):" Experience outside of the classroom also enhance learning by providing students with opportunities to practice skills of inquiry, values analysis and clarification, and problem-solving in everyday situations."

Sustainable development not only addresses environmental and scientific issues; it is equally concerned with social issues and behaviour,-including values and outlooks, interpersonal relationships and with helping others who are less fortunate.

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