



EDUCATING FOR VALUES AND ETHICS: IMPACT OF EDUCATION ON SOCIAL SUSTAINABILITY

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Abstract

Purpose: The study presents the role of educating for values and ethics: impact of education on social sustainability in Indian context. These organizations are focused towards doing well for the communities at large.

Methodology: The study was done after extensive literature review to find the role of educating for values and ethics and its impact on social sustainability.

Findings: The study findings suggest that educational institutes play significant role in enhancing the social development. The study also shows that there is a significant connection between education for sustainability and values that underpin sustainable behavior.

Originality: The linkage between social sustainability and education needs to be reestablished so that similar curriculum could be taught to the youth to generate the interest towards social responsibility.

Keywords: Sustainable Development, Sustainability, Education

INTRODUCTION

Sustainability refers to the conservation, protection, and regeneration of resources over an indefinite period of time. Central to sustainability is the idea that today's decisions affect the future of human health and well-being, the environment, and the economy. Sustainability requires knowledge and understanding of past events as well as the ability to make informed predictions of future events. From an aboriginal perspective, the concept of sustainability has historical roots and has traditionally guided aboriginal decision making. Decisions must be sustainable now and in the future, for future generations to come. The aim of sustainability is to make equitable decisions and to conduct activities so that human health and well-being, the environment, and the economy can be improved and maintained for future generations.

Sustainability is a complex idea. It requires understanding, not just of social, environmental, and economic issues, but of their on-going inter-relationship and inter-dependence. The process of sustainable decision making involves a critical examination

of our priorities, habits, beliefs, and values. The challenge of sustainability is that it must be a collaborative process and citizens need to agree upon a vision as well as an action plan for the future. This requires collective and conscious decision making, and is the heart of Education for a Sustainable Future.

“Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.”(World Commission on Environment and Development, 1987).Sustainable development, as described in the 1991 State of the Environment Report for Manitoba, “has rapidly become a watchword for describing efforts to reverse the deterioration of the Earth’s life-support systems and ensure that our future is environmentally and economically sustainable” (Manitoba Environment, 1991).

Education for a sustainable future can effect change and provide students with hope. It can instil within students a desire to work for the collective good of the planet, and inspire needed changes in behaviours that will help ensure our survival. If this paradigm shift is to occur, sustainability must become a global priority.Fundamental changes in education will be necessary to meet the challenges and opportunities that lie ahead. Promoting the concept of lifelong learning is the key to achieving sustainable local, national, and global practices.

World citizens require new ways of thinking to creatively address and resolve complex social, environmental, and economic issues that affect the quality of life on this planet. Education can facilitate this change. However, in order to do so, students will require a new set of knowledge, skills, and values; they will also need to demonstrate life practices that reflect an understanding of the inter-dependence of human health and well-being, the environment, and the economy. Students must be challenged to understand and apply the concepts of sustainability and to envision a sustainable future. They need to know what to aim for in their future, and to understand that they have the personal power to make a difference and effect change.

Humans have always understood that all things might not be possible; however, we are beginning to understand that all that is possible may be neither wise nor desirable. We have reached a point in human history where we have both the technological, social, and ethical capabilities to make a sustainable world a reality, and the obligation to do so. Students must be given an opportunity to understand this reality.

LITERATURE REVIEW

With sustainable development as a guiding precept, one considers simultaneously the positive and negative impacts of any decision on human health and well-being, the environment, and the economy. The purpose of this is to integrate and balance our needs, so that an equitable quality of life for all can be achieved and sustained in the future, for future generations to come. Figure 1 illustrates this interconnected relationship.



Figure 1: Sustainable Development

Sustainable human health and well-being is characterized by people coexisting harmoniously within local, national, and global communities, and with nature. A sustainable society is one that is physically, psychologically, spiritually and socially healthy. The well-being of individuals, families, and communities is of prime importance. A sustainable environment is one in which the life-sustaining processes and natural resources of the Earth are conserved and regenerated. A sustainable economy is one that provides equitable access to resources and opportunities. It is characterized by development decisions, policies, and practices that respect cultural realities and differences, and do not exhaust the Earth's resources. A sustainable economy is evident when decisions, policies and practices are carried out so as to minimize their impact on the Earth's resources and to maximize the regeneration of the natural environment. Decisions or changes related to any one of the three components — human health and well-being, the environment, and the economy — have a significant impact on the other two components and consequently, on our quality of life. Decision making must take into account all three components to ensure an equitable, reasonable, and sustainable quality of life for all.

Hungry people will not care if their actions endanger an edible species or an important habitat. Unemployment, injustice or insecurity leads to desperation and the need to survive at all costs. To protect an environment for future generations, we have to build a society on a foundation of clean air, water, soil and energy and rich biodiversity to fulfil our biological needs; we have to ensure full employment, justice and security for all communities to serve our social needs; and we have to retain sacred places, a sense of belonging and connectedness with nature and a knowledge that there are cosmic forces beyond our comprehension or control, to satisfy our spiritual requirements (Suzuki, 1999).

Sustainable Development, Social Responsibility, and Equity Sustainable development

supports principles of social responsibility and equity. Williams (1994) believes that the concept of equity is essential to the attainment of sustainability. This includes equity among nations, within nations, between humans and other species, as well as between present and future generations. Sustainable development is, at the same time, a decision-making process, a way of thinking, a philosophy, and an ethic. An important idea that underlies the decision-making process within a sustainable development approach is the concept of compromise. In order to achieve the necessary balance among human health and well-being, the environment and the economy, some compromises will be necessary.

Chalkley (2006) expresses the view that education for sustainability must seek outcomes that involve not only knowledge and skills but also the values that underpin sustainable behaviour by businesses, government and society. Chalkey (2006) categorized education into knowledge, skills and values indicate that education for sustainability seeks three primary outcomes; graduates should know about sustainability issues, they should have the skills to act sustainably if they wish to and they should have the personal and emotional attributes that require them to behave sustainably. In some cases, however, higher education specifically avoids situations that may appear to influence students to subsequently behave in a particular manner. Lemkowitz et al. (1996), for example, provide an example of a long-established first-year course for science and engineering students that stimulates critical and creative thought in sustainability (and assess its attainment), but does not attempt to teach any particular viewpoint or assess students on their attainment of particular values and attitudes.

The hierarchical nature of affective learning outcomes (Vieyra, 2006), may prove to be important as it emphasises that, as with cognitive skills, some outcomes may be easier to achieve than others. This hierarchy is relatively straightforward to apply to the developing environmentally aware learner. We start with a willingness to listen, to read and to acquire information. We progress to discuss environmental issues with others and then formulate our own views on the issues to develop opinions that shape our own interactions with others, and with our environment. Later, we start to make life choices and experiment with prioritising “good for us” “good for our dependants” and “good for our descendants”. At some point, and at the top of this particular hierarchy, we emerge showing self-reliance, an ability to cooperate or even lead the confidence to live our life in the way that we chose and a commitment to constantly seek new ways to achieve and to reassess our decisions. The hierarchy also allows higher educators to address values, attitudes and behaviours to different extents, depending on their own stance towards these complex issues. Many educators are comfortable with teaching processes that emphasise a willingness to listen, to discuss and to acquire information. But, they may not be comfortable with a quest for higher order outcomes relating to opinions and behaviours, as described by Lemkowitz *et al.* (1996).

SUSTAINABILITY KNOWLEDGE, SKILLS, VALUES, AND LIFE PRACTICES

In order for students to make informed decisions and embrace life practices that

demonstrate an understanding of and belief in sustainability, they require particular knowledge, skills, values, and life practices. This will enable them to

- Commit to a lifestyle consistent with the principles of sustainability.
- Take personal responsibility for a sustainable future and work towards an equitable quality of life for all.
- Think critically about global issues and take action locally.
- Advocate for a strong economy and for government policies that support a strong economy.
- Understand the consequences of unequal distributions of power; inequalities in the sharing and distribution of global resources; and the impacts of rampant consumption, consumerism, and built-in obsolescence — and live in such a way as to lessen the impact of these consequences.

The information that follows focuses on sustainability knowledge, skills, values, and life practices.



Figure 2: Understanding Sustainability Issues: Knowledge Linkages

Figure 2 shows the understanding of sustainability issues and the knowledge linkages. Students require a strong knowledge base in order to understand the complex issues and linkages of sustainability. In short, they require knowledge of human health, the environment, and the economy as well as an understanding of their local, national, and global interdependence.

The source of this knowledge can be found within existing curricula, including science,

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social studies, mathematics, language arts, and dramatic arts, health-physical education, human ecology, and other disciplines.

Students require a particular set of values in order to make decisions and engage in life practices that reflect sustainability. A student who embodies the values of sustainability

- Respects himself or herself, values his or her own health, and does not subject himself or herself to unnecessary health risks.
- Is informed and cares about local, national, and global issues, and cares about the future.
- Demonstrates respect for the environment; consumes less; refuses, replaces, reduces, reuses, recycles, restores, and revitalizes.
- Advocates for the health of the environment and for government policies that support the environment.
- Demonstrates awareness of how his or her actions affect both others and the environment and makes choices to contribute to the common good.
- Advocates for a strong economy and for government policies that support a strong economy.
- Is willing to share.
- Respects, cares for, and works cooperatively with others.
- Participates in the community and is involved in community service.
- Works cooperatively to identify and address common concerns and opportunities.

The chart that follows illustrates a number of these values.

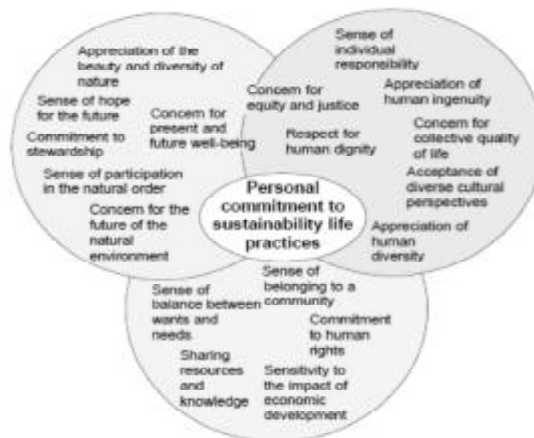


Figure 3: Sustainable Life Practices

Figure 3 shows the sustainable life practices. The students of today are the decision-makers of tomorrow. Although specific issues related to sustainability are likely to change over time, a model for sustainable decision making has longevity and should be able to be applied to new situations.

Students should be encouraged to research sustainability issues, to think critically, and to form and defend their opinions. They need to learn how to find creative solutions for complex problems related to sustainability, and to be aware of the future consequences of their decisions. In doing so, they will develop skills needed to engage in informed and sustainable decision making.

METHODOLOGY

The population of the study consists of the people who bought an apartment in the last few years or are planning to buy one, or are the young well educated people who have some knowledge about real estate. A total of 120 questionnaires were distributed out of which 112 came out to be fully filled. Therefore, a convenience sample is selected consisting of 112 persons. The general consensus on sample size and scale for generalizability was (Hair et al., 1998): there should be five observations for each independent variable. The independent variables in the research are eight, so sample size should be at least 40 (5 for each variable). Considering the focus of the thesis on select organizations, the sample of 181 is considered adequate (even if we go to desirable ratio between 15 to 20 suggested in books (Hair et al., 1998).

The questionnaire-based survey has been carried out for organizations in manufacturing and services sectors. The unit of analysis is the firm and product/service/market initiatives undertaken by the organization(s) in India (this also includes the multinational companies which have offices in India). The questionnaire was developed through the inputs from the literature survey and the empirical case studies. After establishing the reliability of the questionnaire, it was mailed to various organizations selected through snowball sampling technique.

DATA ANALYSIS

The qualitative data collected through questionnaire survey has been validated for its constructs. Statistical analysis has been carried out for testing the research hypotheses. The conceptual model of sustainable outcomes, evolved on the basis of literature survey has been empirically tested through bivariate and multivariate analysis of the responses received through the survey study. Table 1 and Figure 4 shows that education for sustainability must seek outcomes that involve not only knowledge and skills but also the values that underpin sustainable behaviour by businesses, government and society.

Table 1: Education for sustainability must seek outcomes that involve not only knowledge

and skills but also the values that underpin sustainable behaviour by businesses, government and society.

RATINGS	FREQUENCY	PERCENTAGE (%)
1	0	0
2	5	7.35
3	10	14.70
4	15	22.05
5	26	38.23
6	12	17.64
7	0	0
Total	68	

DATA INTERPRETATION

According to Table 1, 17.64 per cent of the respondents rated 6 on the scale, i.e. education for sustainability must seek outcomes that involve not only knowledge and skills but also the values that underpin sustainable behaviour by businesses, government and society. 38.23 Per cent somewhat agree with the above statement and 22.05 per cent have neither agreed nor disagreed to the statement. Only 7.35 per cent of people have unclear idea regarding the statement, have rated 2, i.e., do not believe that education for sustainability must seek outcomes. This shows that there are hardly any or a very few people these days who think that there is no connection between education for sustainability and values that underpin sustainable behaviour.

Table 2: The mechanism of skill formation i.e. education and work experience enhance the individual's skills, thereby raising their market value to employers.

RATINGS	FREQUENCY	PERCENTAGE (%)
1	0	0
2	4	5.88
3	4	5.88
4	8	11.76
5	25	36.76
6	15	22.05
7	12	17.64
Total	68	

DATA INTERPRETATION

According to Table 2, 22.05 per cent of the respondents rated 6 on the scale, i.e. education and work experience enhance the individual's skills, thereby raising their market value to employers. 36.76 Per cent somewhat agree in the above statement and 11.76 per cent have neither agreed nor disagreed to the statement. 5.88 per cent of the respondents, who seem to have unclear idea regarding the statement, have rated 2, i.e., do not believe that education and work experience enhance the individual's skills, thereby raising their market value to employers.

RESULTS

The above data analysis shows that significant number of people do not believe that education for sustainability must seek outcomes. This shows that there are hardly any or a very few people these days who think that there is no connection between education for sustainability and values that underpin sustainable behaviour. Moreover the result also shows that there are hardly any or a very few people these days who think that there is no connection between education or work experience and enhancement of the individual skills which in turn will be helpful in understanding its connection to social responsibility.

Furthermore, the integration of sustainability concepts within new and existing curricula helps students develop the ability to:

- Use integrative approaches to learning.
- Work cooperatively to identify and address common concerns.
- Develop and apply critical thinking skills to complex local, regional, and global issues.
- Think creatively, question established ways of doing things, and be self-directed.
- Research, access, acquire, and apply knowledge.
- Respect diverse positions.
- Propose creative solutions to sustainability problems, and contribute to a sustainable future.

Based on the above literature review and univariate data analysis, we propose the following propositions for future direction of research:

P1: Education for sustainability enhances the values that underpin sustainable behaviour by businesses, government and society.

P2: Investments in human resources improve productivity, employment prospects and

social sustainability. These propositions can form the basis for future research work and can contribute towards the development of theory in this field.

Human beings and the natural world are on a collision course. Human activities inflict harsh and often irreversible damage on the environment and on critical resources. If not checked, many of our current practices put at serious risk the future that we wish for human society and the plant and animal kingdoms, and may so alter the living world that it will be unable to sustain life in the manner that we know. Fundamental changes are urgent if we are to avoid the collision our present course will bring about.

The massive tampering with the world's interdependent web of life — coupled with the environmental damage inflicted by deforestation, species loss, and climate change — could trigger widespread adverse effects, including unpredictable collapses of critical biological systems whose interactions and dynamics we only imperfectly understand. Uncertainty over the extent of these effects cannot excuse complacency or delay in facing the threat.

We can move faster toward a sustainable world if we understand the principles underlying this concept, and provide humanity with the skills to critically evaluate information, adapt to change, and find creative solutions to intricate problems. A sustainable future will require people who think and act differently than they do today and will necessitate industries and businesses to minimize their own negative impact on the earth's ecosystems. It will therefore require persons with new skills, knowledge, attitudes and values in order to take personal responsibility for sustainable development. Because human beings are the centre of concerns for sustainable development, significant attention must be given to education to improve their capacity to address environment and development issues (IUCN, 1997). How do we protect our environment, meet everyone's basic needs, and keep our economy dynamic and maintain a just and healthy society, all at the same time? Sustainable development is about making difficult trade-offs, about weighing all the options, and deciding on a course of action that considers everyone's interests, including our children's and grandchildren's (Manitoba Conservation, 2000). Sustainable Development is an approach to daily decisions that integrates probable consequences to the environment, the economy and human health and well-being. It is a way of making decisions that balances the needs of today without sacrificing the ability of future generations to meet their own needs (Manitoba Conservation, 2000).

What sort of world are we headed toward? Human numbers are growing, forests are shrinking, species are dying, farmland is eroding, fresh water supplies are dwindling, fisheries are collapsing, rivers are constricting, greenhouse gases are accumulating, soot is contaminating the air, and lead is contaminating our blood. It is not too late, however, to change the course of events, to build societies that are both environmentally sustainable and industrial. It is not too late to build a world where the air is safe to breathe, water is safe to drink, and resources are shared among the entire world's population — to build a world, that most people hope their children will inherit (Roodman, 1999).

DISCUSSION AND CONCLUSION

We have an important role to play with respect to sustainability, and can make significant contributions to an equitable and sustainable quality of life for all. The challenge of Education for a sustainable future is to enable students to make choices that incorporate the essential principles and values of sustainability. In order to do this, students need to be given opportunities to think and act according to the principles of sustainability. This process will contribute to their development as informed and responsible citizens who demonstrate attitudes and make decisions that reflect concern for the sustainability of this planet.

Imagine a world in which smog-shrouded cities and acid rain-ravaged forests are only a distant memory. Imagine a world in which human societies cooperate with rather than abuse other cultures, in which the people of Ethiopia, the Amazonian rain forests, and other environmentally threatened areas are no longer driven from their homes. Imagine a world in which a stable human population seeks to preserve and nurture the diversity of both the Earth's biota and its human cultures (Kaufman *et al.*, 1996).

Education for sustainability seeks knowledge, skills and affective outcomes

Higher education initiatives that seek outcomes related to environmental sustainability are extremely diverse. They may involve taught elements with conventional knowledge-based learning outcomes directly related to environmental studies (Manitoba Environment State of the Environment Report, 1991). They may involve taught elements in subjects not directly related to environmental studies, but within which environmental themes are developed. They may also involve the institution making business decisions relating to energy conservation or recycling, or even leadership of, and influence on, local, national and international networks. In most cases, there is an explicit or implicit intention to not only inform groups and individuals but also to influence them to subsequently behave in a particular manner: Higher Education's most valuable contribution to sustainability lies in providing large numbers of graduates with the knowledge, skills and values that enable business, government and society as a whole to progress towards more sustainable ways of living and working (World Commission on Environment and Development, 1987; Chalkley, 2006).

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The Significance of Character

The man of character develops upwards, the man without character slips downwards. The man of character makes history, the man without it is marred by history. The man of character is the hope, solace, well-being, peace and aspiration of mankind; the man without character causes trouble, strife, worry and misery in society.

Character holds the key to any riddle of life. It can break each and every vicious circle. There is no mystery character cannot unravel. There is no wound it cannot heal, no want it cannot fill, and no loss it cannot make good. Hence, the most important thing among all creative endeavors of life is to know how to build one's own character and help build the character of others with whom one associates.

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