

## The Context for Holistic Education in Sustainability

*Sustainability is less a fixed state that can be reached and maintained, and more a community-based process of learning how to participate appropriately in the complex social, ecological, cultural and economic dynamics that characterise the world of the 21<sup>st</sup> century.*

The shift towards a culture of sustainability will neither be a purely bottom-up nor a purely top-down process. In order for government frameworks, policies, and incentive programmes to take root in the private sector and civil society, widespread community participation will be required. Motivated and aware citizens need to be supported by appropriate policy frameworks to make sustainable consumer choices economically possible, just as government incentive schemes require educated and aware citizens to implement sustainable practices at a community and neighbourhood scale.

A renewed sense of ecologically and socially responsible business and citizenry that is both globally and locally aware will have to emerge along side with inspired political leadership, if we are to respond in time to the interconnected challenges of climate change, resource depletion, and national and international inequity. Eco-social literacy as prerequisite for the emergence of a culture of sustainability puts education, communication, and the media into the crucial role of being the facilitator of the necessary changes in worldview and value systems, as well as, in technological and scientific awareness, which ultimately will lead to the profound changes in lifestyles, aspirations, and culture that will characterize the shift toward sustainability.

Education for social and ecological literacy needs to be aimed at all the stages of the life-long learning path - from the role of parents and community, primary and secondary education, to vocational training, apprenticeships and higher degrees, and on to continued professional development, and evening classes for adults of all ages. Socio-economic realities, local and global environmental conditions, the world we live in, are now changing at such a speed that the traditional three phases of life (education, work, retirement) cannot be so clearly separated anymore. New trends show a need for continued education throughout life and for flexible working arrangement extending beyond the retirement age.

**Education for socio-ecological literacy, as the basis of education in sustainability, is the single most promising catalyst for widespread participation in the sustainability transition. While the media also plays a crucial role in facilitating such education for a large proportion of the population, this paper will focus on the role of education in general and higher education in particular. Without increased socio-ecological literacy we cannot expect citizens, governments, and business to respond appropriately to the complex and interconnected challenges posed by the urgent need to transition into a culture of sustainability.**

Prof. David Orr, one of the world's foremost environmental educators and originator of the term ecological literacy, suggests that "an ecologically literate person would have at least a basic comprehension of ecology, human ecology, and the concept of sustainability, as well as the wherewithal to solve problems" (in Stone & Barlow, 2005, p.xi). Peter Buckley, co-founder of the Centre for Ecoliteracy in Berkeley, California believes that "at the heart, the ecological problems we face are problems of values. Children are born with a sense of wonder and affinity to nature. Properly cultivated, these values can mature into ecological literacy, and eventually into sustainable patterns of living (in Barlow, 2004, p.7).

Orr explains: "Real ecological literacy is radicalizing in that it forces us to reckon with the roots of our ailments, not just their symptoms" ... this ultimately "leads to a

revitalization and broadening of the concept of citizenship to include membership in a planet-wide community of human and living things” (Orr, 1992, p.88). The important role of education for sustainability and the need for increased social and ecological literacy as well as a more holistic approach to science has been pointed out by a number of authors (Orr, 1992; Goodwin, 2001; Capra, 2004; Wahl, 2005; Bower, 2001; O’ Sullivan, 1999; Sterling, 2001; and Wheeler *et al.*, 2000).

In order to achieve the lasting effect of motivating an ecologically and socially literate citizenry and business to engage in activities within their local and regional communities that support a transition towards more sustainable practices and systems, education for sustainability has to be transformative. Such education has to provide citizens with the knowledge why a shift towards a culture of sustainability is an ecological and social imperative in order to avoid run-away climate change and the associated societal break down. Yet it has to go deeper than that, offering a profoundly transformative experience that raises awareness, shifts paradigms and worldviews, and changes value systems, thereby causing and sustaining a change in lifestyle.

Transformative education for sustainability has to inspire people with a hopeful vision of a better and more meaningful life, beyond purely material consumption. It has to facilitate the creation of a new vision that offers a higher quality of life and a more desirable future for individuals, their families, their communities, and humanity as an interdependent whole. In his insightful book *Sustainable Education: Re-visioning Learning and Change*, Stephen Sterling proposes: “Instead of the ethos of manipulation, control, and dependence, the ecological paradigm emphasizes the value of capacity building and innovation, that is, facilitating and nurturing self-organization in the individual and community as a necessary basis for ‘systems health’ and sustainability” (Sterling, 2001, p.55).

Social and ecological literacy helps people to understand the basic “patterns that connect” (Capra, 2002) and thereby create individual, community, ecosystems, and planetary health as a basis for long-term resilience and health (Wahl, 2007). It enables citizens to take responsibility for their own effects on the locally, regionally and globally interconnected world we live in and become active co-creators of the emerging culture of sustainability. Sustainability challenges all of us to envision, design and create a sustainable future for all of humanity. Sustainability is less a fixed state that can be reached and maintained, and more a community-based process of learning how to participate appropriately in the complex social, ecological, cultural and economic dynamics that characterise the world of the 21<sup>st</sup> century.