Developing value-based, holistic education for sustainable living

Victoria W. Thoresen, associate professor

Hedmark University College, Hamar, Norway

Abstract

Sustainable consumption and production have been defined as consumption and production which are ethically acceptable, socially responsible, ecologically justifiable, economically viable and universally accessible (1). No new concept or set of definitions, however, can be adopted overnight or translated into action without a previous learning process which takes time and includes many. Research shows that there is an outstanding lack of integrated educational initiatives which deal coherently with the ethics, economics, environmental consequences and social effects of sustainable consumption and production. The need for value-based, holistic, practical and interdisciplinary education for sustainable living has been identified in both countries of the North and the South (2).

This paper will focus on the project: "The Institutional Strengthening of Education for Sustainable Consumption - Advancing ESC policy and implementation strategies" and the insights to be gained from it about how to research and implement education for sustainable living.

The project is directed by UNEP (The United Nations Environment Program), sponsored by the Marrakech Task Force for Education for Sustainable Consumption lead by Italy, and assisted by PERL (The Partnership for Education and Research about Responsible Living). The project is a contribution to the U.N. Decade of Education for Sustainable Development (DESD, 2005-2014) and is being carried out in Tanzania, Chile and Indonesia. Its main objective is to support the mainstreaming of education for sustainable consumption (ESC) and lifestyles in formal education as well as in informal education at the national and local levels. The project consists of research (policy and curriculum review and analysis) and implementation (multi-stakeholder national roundtable discussion and the development of nationally adapted learning tools).

1 The emergence of education for sustainable consumption (ESC)

The international community has since the Second World War focused on several issues which have contributed to the emergence of the ESC. Education, itself, has been under scrutiny and reform, as have the concepts of development and sustainability. Milestone documents which have pointed to the importance of updating education and have lead to changes in the scope and content of education include the Declaration of Human Rights (1948), The Convention on the Rights of the Child (1989) and the Jomtien Declaration on Education for All (1990) which led to the Dakar Framework for action related to the quality of education. The Delor Report (1996), *Learning: The Treasure Within*, invigorated the debate about the role and form of education and the international Millennium

Development Goal #2 placed the achievement of universal primary education on the international agenda.

Although global perspectives on development have also undergone many modifications since the decades of colonialism and post-colonialism, they have largely concentrated on stimulating economic growth, improving health (especially in light of famines and HIV-AIDS), having access to education and reducing poverty. Alongside of the Gross National Product, the Human Development Index (1990-2012) was created as a set of indicators for measuring human development. With regards to consumption, the UNDP Human Development Report (1998) stated conclusively:

"Consumption clearly contributes to human development when it enlarges the capacities and enriches the lives of people without adversely affecting the wellbeing of others. It clearly contributes when it is as fair to the future generations as to the present ones. And it clearly contributes when it encourages lively, creative individuals and communities. But the links are often broken and when they are consumption patterns and trends are inimical to human development... Consumption patterns today must be changed to advance human development tomorrow. (3)"

The Human Development Report of 2011 goes even further, stating that "sustainability is inextricably linked to equity— to questions of fairness and social justice and of greater access to a better quality of life". In addition to the issues such as sustainable consumption which were highlighted in development reports such as the HDR, the Millennium Development Goals also reflected the global community's consensus as to which essential development issues to concentrate on, with Millennium Goal #7 focusing on the environment.

It is through the work of the environmental movement with its roots in Rachel Carlson's book, *Silent Spring*, and the first international meeting at the U.N. Conference on Human Environment in Stockholm (1972) followed by the Brundtland Commission Report (1987), *Our Common Future*, that the concept of education for sustainable consumption began to gain attention. In 1992 when Agenda 21 was approved at the U.N. Conference in Rio de Janeiro, education was officially connected to sustainable development as an enabling strategy for implementation. Awareness-raising and behaviour change toward more sustainable lifestyles was the expressed goal. The Johannesburg World Summit on Sustainable Development (2002) further defined global commitments related to sustainable development and initiated the Decade of Education for Sustainable Development (DESD 2005-2014).

It was, however, in the context of the debate on climate change and in light of the evidence provided by, among others, the Intergovernmental Panel on Climate Change (1990/1997/2007) about the anthropocentric effects on climate of consumption and production, that acknowledgement of the need for sustainable consumption began to increase.

The Implementation Plan of the Johannesburg World Summit on Sustainable Development gave rise to the Marrakech Process (2003) which encompassed a set of Task Forces coordinating relevant projects. The Process included The Marrakech Task Force on Education for Sustainable Consumption (led by the Italian government) and the Task Force on Sustainable Lifestyles (led by the Swedish government). The Marrakech Task Forces collaborated with UNEP to stimulate projects working both at the grassroots with teachers, providing learning methods and materials, as well as working on the policy level, providing among other things, a generic roadmap and core curriculum on ESC. By 2009 Education for Sustainable Consumption had emerged as a core theme of Education for Sustainable Development, first in the UNESCO-DESD, Bonn Declaration and subsequently in the UN DESD strategy 2010-2014. ESC is an integral element in the 10-Year Framework of Programs which was negotiated at the UNCSD19 in May 2011 (but not approved as the UNCSD19 was inconclusive on all issues).

2 The present status of education for sustainable consumption

Education for sustainable consumption is defined as an essential part of education for sustainable development. It is responsibility learning that aims to stimulate the individual's awareness of the central role they play in forming society and to empower them to choose responsible, sustainable lifestyles. Education for sustainable consumption involves learning how to make lifestyle choices and also to effect changes by seeking creative new solutions and engaging in policy debates (4).

Education for sustainable consumption (from which education for sustainable living has evolved), encompasses several diverse yet complementary fields of study. Major elements of ESC come from ethics and values-education, consumer education, civic training and environmental education. ESC is interdisciplinary and incorporates dimensions of systems analysis and global education methodologies (5). Due to the highly controversial nature of the issue of sustainable consumption and production, the implementation of ESC is understandably also influenced by the political positions about growth and consumption of the curriculum developers and policy makers in respective countries.

Research carried out by the OECD in their report on Consumer Education (2009) indicated that there was little or no education for sustainable consumption occurring in connection with consumer education in the OECD countries surveyed (6). Some non-governmental organizations, Consumers International in particular, were running awareness campaigns to encourage more reflected, ethical and greener consumer choices, but these were most often outside of the official curricula or poorly linked to other environmental and developmental subjects. Nonetheless, some countries have made active efforts to establish policies concerning aspects of sustainable consumption for example, cleaner production or waste management. Major steps have been made in East Asia for greening markets (7).

Environmental education courses have concentrated to a great extent on the natural ecosystems and biological conditions. The international concern over biodiversity strengthened the position of environmental courses in many curricula. However, according to surveys carried out by UNESCO, environmental education in most regions is interpreted broadly to include social, economic and political dimensions (8). Yet, to what extent these dimensions relate to individual consumption patterns rather than macro patterns of production is not identifiable.

International surveys about civic education reflect a focus on participatory democracy and the role of citizens who involve themselves in the established political systems and parliamentarian processes (9). They do not appear to include training in stakeholder involvement and general community service, both of which are aspects of education which many youth in the Global Survey on Sustainable Lifestyles, *Visions for Change*, felt were lacking and wished to have had in order to be more enabled to create change (10).

In UNEP's document, *Here and Now! Education for Sustainable Consumption* the present status of ESC is described as lacking cohesiveness and innovation.

"On the conceptual level, the understanding of the vision of sustainable consumption based on sustainable human development is often vague or lacking. On the level of course content, some of what is presented is fragmented and occasionally based on outdated scientific data and models which have proven to function poorly in real life. On the didactical level, teachers struggle to combine theory, research and practice, finding it difficult to connect the course content to the everyday lives of the students. And on the level of student motivation, teachers encounter disillusionment, passivity, fatalism and a sense of powerlessness (11)."

3 Attemps to mainstream ESC

3.1. Educational development processes

Historically, changes in education have occurred either through formal educational systems which modify their content and/or methodology or through social learning stimulated by crisis (referring, in this context, to circumstances demanding knowledge or skills not previously attained), technological innovations or media interventions. The first process is generally considered to encompass curriculum reform and adjustment of teacher training to adapt to the curriculum reforms. The process of social learning can be seen, for example, in the increasing cases of communal risk assessment and disaster preparedness in relation to extreme weather conditions. Media's role encouraging ESC is visible in articles such as the box below.

Consumption and human development

Runaway growth in consumption among the best-off people in the world is putting unprecedented pressure on the environment. The inequalities remain stark. Today, there are more than 900 cars per 1,000 people of driving age in the United States and more than 600 in Western Europe, but fewer than 10 in India. US households average more than two television sets, whereas in Liberia and Uganda fewer than 1 household in 10 has a television set. Domestic per capita water consumption in the very high Human Development Index (HDI) countries, at 425 litres a day, is more than six times that in the low HDI countries, where it averages 67 litres a day.

Consumption patterns are converging in some respects as people in many developing countries are consuming more luxury goods: China is poised to overtake the United States as the world's largest luxury consumer market. But even among very high HDI countries, consumption patterns vary. Consumption accounts for 79 percent of GDP in the United Kingdom and 34 percent in Singapore despite the countries' having nearly the same HDI. Among the explanations for these differences are demographic patterns and social and cultural norms, which affect savings practices, for example.

At the same time, the links with human development are often broken, as explored in the 1998 *Human Development Report*: new products often target richer consumers, discounting the needs of the poor in developing countries.

Education can be fundamentally important in tempering excessive consumption. Such efforts have been promoted by the UN General Assembly's declaration of the UN Decade of Education for Sustainable Development (2005–2014) and United Nations Educational, Scientific and Cultural Organization activities geared at encouraging sustainable consumption.

Source: Data from Morgan Stanley, as cited in The Economist 2008a; data from Bain and Company 2011, as cited in Reuters 2011; Heston, Summers and Aten 2009 (Penn World Table 6.3).

There is limited research about the extent to which ESC is already mainstreamed into existing learning systems. Some examples of individual initiatives have been collected and are available in such documents as The YouthXChange Newsletter (www.youthxchange.net), Learning to Live Together—ESC Policies and Practices (www.perlprojects.org), and Learning to Transform Oneself and Society ESC—Policies and Practices (www.perlprojects.org). With a few exceptions, the ESC initiatives have been taken by civil society organizations.

Modifying educational systems' content and/or methodology is the purpose of curriculum reform. Curriculum reform in formal educational systems has several phases and normally involves:

- a. research and debate legitimizing the curriculum changes,
- b. the political or ideological descriptions of the intended changes,
- c. the official, written documents describing the hoped-for development,
- d. the interpretation made by educators (headmasters, rectors, teachers, etc),
- e. the form it takes when it is actually carried out (12).

Proceedings: Global Research Forum on Sustainable Consumption and Production Workshop, June 13-15, 2012, Rio de Janiero, Brazil.

Social learning processes, while not necessarily as structured as curriculum reform often consists of steps which are similar to the ones described above. Therefore, this model will be used to examine the Institutional Strengthening Project and the lessons which can be attained from it so far.

3.2 The Institutional Strengthening Project

The Institutional Strengthening Project is a project which seeks to advance ESC policy and implementation strategies and is thereby directly related to curriculum development processes, even though the creation of informal and non-formal educational initiatives is also included in the project's proposed activities. The Institutional Strengthening Project (13) is being implemented by UNEP (the United Nations Environment Programme) in close cooperation with Italy (the Ministry for the Environment, Land and Sea) and UNESCO, and other partners such as the Partnership for Education and Research about Responsible Living (PERL) and Consumers International (CI). The project is taking place in three countries from different regions and of different economic development levels: Chile (Latin America); Indonesia (Asia and the Pacific); and Tanzania (Africa).

The project has four distinct phases:

- 1) Review and Analysis of existing national policy frameworks and initiatives relevant to ESC, including sustainable development, sustainable consumption and production (SCP) and education strategies and/or plans, in order to identify possible connections and interactions which might enable the advancement of ESC. The objective of this phase is also to define the best way to support integration of ESC into existing national policy frameworks.
- 2) Multi-stakeholder national roundtable discussions with policy-makers and education experts, as well as with other stakeholders, to develop best national approaches and tools for ESC, including the adaptation of UNEP's *Here and Now! ESC Recommendations and Guidelines* to national contexts, priorities and needs. This dialogue hopes to provide inputs on how best to coordinate policy and implementation strategies.
- 3) Development of national guidelines and recommendations on ESC based on the outcomes of the roundtable discussion and dissemination among relevant ministries (e.g. environment, education, consumer affairs), education experts and relevant stakeholders, to support the development of the necessary policy instruments and a related national implementation strategy on ESC. The implementation strategy envisioned could consist of a road map, which will define the necessary steps to cement ESC in curricula and at ground levels (schools, NGOs, etc.), identify the main actors of ESC implementation, and encourage training and awareness-raising sessions at the national and local levels.
- 4) Monitoring and evaluation consisting of a UNEP survey to be circulated six to twelve months after the finalization of the national guidelines and recommendations to monitor and evaluate progress. Its results will be collected and evaluated in close consultation with the participants of the roundtables, national specialists and educators / teachers involved, and they will be analyzed in the view of developing the project's final conclusions and recommendations.

3.2.1. Results so far

a. Establishment of ISP international advisory board

UNEP invited a number of experts from around the globe to participate in an international advisory board which would convene through telephone meetings to consult on the various parts of the project as it developed. The members of the advisory group were mostly members of the PERL network and therefore many knew each other previously. The members represented a diverse selection of countries, professional disciplines and languages. The group provided relevant input and feedback on the issues of which countries to select, which implementing partners to approach and how the research guidelines template should be. Some practical problems arose due to time differences around the globe, but in addition to the telephone meetings there was transparent sharing of information via emails.

b. Selection of countries

The process of country selection for the pilot project was an extensive one, taking into consideration socio-geographic differences, governmental interest, past ESC and ESD experience, and the availability of implementing partners. Letters of invitation were sent to each government by UNEP. Tanzania, Chile and Indonesia responded positively. UNEP circulated a document outlining the relevant ministries' proposed involvement. Their involvement was expected to consist of

- providing endorsement for the implementation of the ESC project that implies the promotion of the project among stakeholders, including government entities, educators, and civil society.
- designating a focal point at the respective ministry to participate in the Steering Committee
 for the project implementation, which involves participating in teleconference meetings,
 providing comments and strategic advice on the development of both the national guidelines
 and recommendations on ESC and its related national implementation strategy and assist in
 the dissemination of these guidelines and recommendations and promoting their
 implementation.
- supporting the policy review and analysis by providing the local implementing partner with existing official public documents as needed (e.g. policies, national strategies and programmes related to ESD/ESC) and a contacts list of relevant stakeholders at the various government ministries to be consulted for the policy review and analysis, and the national roundtable.
- providing guidance and strategic support to the implementing partner for the organization of the national roundtable discussion and hopefully acting as co-hosts of this event.
- participating in the monitoring and evaluation process, which involves a UNEP survey to monitor and evaluate the progress.
- Participating in the information exchange on the ESC project implementation with other pilot countries by sharing best practices/lessons learned, and engaging in the discussion with other countries in the regions in this respect.
 - c. Selection of implementation partners

The local implementing partners who were selected are: Consumers International Regional Office for Latin America and the Caribbean (CI-ROLAC) for Chile, Yayasan Pembangunan Berkelanjutan (YPB)/ Foundation for Sustainable Development for Indonesia and the National Environment Management Council (NEMC) for Tanzania.

d. Research Guidelines

Research guidelines and a template were created to assist the implementing partners in the review and analysis process. The research was intended to provide the project and the roundtable participants with the necessary background from which further decisions could be made. Effort was made to ensure that the review reflected both the educational policies and curricula provisions as well as the policies dealing more generally with sustainable development and sustainable production.

e. National Roundtable discussions

In Tanzania and Indonesia the national roundtables were held (the roundtable for Chile is planned to take place in May 2012). There were ca. 30 individuals who attended the Tanzanian roundtable and ca. 50 at the Indonesian roundtable. Some participants represented governmental ministries, others were from teacher training institutions, and some were civil society organizations such as consumer agencies, environmental ngo's, and other educational organizations. In Tanzania UNDP's local representative was present. In Indonesia, UNEP's regional representative attended as well as a representative from IGES (Institute for Global Environmental Strategies). The roundtables concluded with a tentative set of recommendations for further action aimed at integrating ESC into the national educational system. At both roundtables a part of the program focused on discussing what ESC is in relation to national conditions and culture.

f. Implementation

The recommendations from the roundtables included numerous follow-up activities. The main activity was the creation of national ESC guidelines. Tanzania's implementing partner has invited some of the

members of the national roundtable to a working meeting to further develop the guidelines. Indonesia's implementing partner is collaborating with the roundtable participants online.

g. Timeframe

The original implementation timeline planned by UNEP has not been able to be kept. Despite close follow-up by UNEP, completion of draft documents and other commitments has taken much longer to do than anticipated.

4. Reflections on the ISP approach per 01.05.2012

The following reflections on the ISP project are based upon

- a) documentation of the processes which were carried out (emails, letters, drafts and reports),
- b) interviews and consultation with a selection of the participants in the processes (per telephone, skype, email, and at n international conference workshop held in Berlin March 23, 2012 where representatives from the implementing partners were present).

The analysis is interpretive and thus the participant's impressions and the reviewer's conclusions are subjective but they have a validity and value in that they are based on a comparative set of data (two identical projects with similar types of results) and examined with identical criteria. The reflections can be crossed checked against the available background data. The conclusions also have credibility due to the fact that they correspond with documented experience of organizational change.

4.1. Research and debate legitimizing the curriculum changes

The Marrakech Task Force for Education for Sustainable Consumption, the Task Force for Sustainable Living, UNEP and UNESCO, together with partners such as PERL and Consumers International, have tried to stimulate the global discourse on ESC for a number of years. This has been done via general research on ESC, conferences, seminars, panel debates, side events at CSD18 and CSD19, articles, booklets, websites, etc. Engaging professionals from various disciplines has been done, and several public debates have been hosted. Government officials from each of the countries chosen for the ISP project were spoken to directly and encouraged to participate.

The research which was carried out by the ISP implementing partners in each pilot country was meant to "provide the project and the roundtable participants with the necessary background from which further decisions could be made." The research report and its contents were referred to in Indonesia at the roundtable discussions and briefly in Tanzania. The research is only slightly reflected in the drafts of the minutes of the roundtables and the recommendations. Nonetheless, it was evident that the process of compiling the research report was an important means by which previous political agreements on issues related to ESC could be brought forth and put in context with other policies. There was a clear (though unintentional) bias to the draft research reports which was modified somewhat in the hearing rounds of the drafts. The implementing partners who had educational experience tended to include policies dealing with educational aspects of sustainable development. The implementing partners who were fundamentally environmental organizations chose to include policies which concentrated on environmental protection. The difficulty in collecting data from outside of one's area of expertise echoes the difficulties voiced in the roundtable meetings of bridging the "ministerial" gaps and including something about education in initiatives from the Ministry of Environment and vice versa.

4.2. The political or ideological descriptions of the intended changes

The limited timeframe of the project (with participants receiving the research report only a short while before the roundtables and the roundtables only being a singular event) did not allow sufficient opportunity for the participants to develop their own descriptions of ESC. The discussions at the

roundtables indicated that the concept of ESC was very new to both Tanzania and Indonesia. In the minutes of the roundtables and in the recommendations much of the phraseology was taken from the generic core curriculum, *Here and Now! Education for Sustainable Consumption* or from documents describing the U.N. Decade of Education for Sustainable Development. This need not, in itself, be negative, but it does indicate that the ideological descriptions of the intended changes lack the national/cultural flavor and may therefore be more difficult for local teacher trainers and teachers to identify with.

The ISP's goal was to be a catalyst for each country in the process of integrating ESC into national programs. Since there are no binding international agreements which require nations to do this, the project's intention was to help the participants develop their own sense of commitment to the task. The national/cultural adaptation of the ideological/political descriptions of ESC in the recommendations documents as well as some of the comments made at the roundtables, indicate that this is a process which has begun in Indonesia and Tanzania but which still requires a good deal more time and capacity building. The ISP project itself does not provide the resources for this; a fact which could be considered a structural weakness in the project depending on the extent to which the governments themselves take on the responsibility for furthering this process.

4.3. The official, written documents describing the hoped-for development

The existing versions of the national ESC recommendations are not the final ones and examination of the drafts may well be premature. The project got off to a late start due to delays in formalizing agreements. Participants at the roundtables and the implementing partners have not yet, within the project's original timeframe, been able to compile a set of documents which are clearly adapted to the national situations. This leads one to assume that there is a need for time for further consultation amongst the stakeholders on what ESC actually is in terms of the policies and conditions of the specific countries.

The contents of the drafts so far have limited reference in them to the incorporation of systems thinking or creative pedagogical approaches to ESC. There is little emphasis on the perspective that sustainable consumption is not only a necessity but also a means of attaining better life quality. Although these may be elements of a more extensive training of educators at a later time, reference to them would give the documents greater pedagogical credibility.

The ISP project requested that the governments involved take an active role in the process and the implementation of the results (ref: page 7). There is not, as yet, a reliable means of measuring this involvement but several observations can be made. In Tanzania where the implementing partner was an organization officially connected to the vice-president's office, the participation of government officials seemed easier to arrange than in Indonesia where the implementing partner was more closely linked with ngo's and educators.

4.4. The interpretation made by the educators (headmasters, rectors, teachers, etc)

Due to the delays in completing the first phases of the ISP project it is not possible at this time to examine how the national guidelines for ESC in Tanzania and Indonesia are understood by educators. This will be a core aspect of the monitoring and evaluation of the project.

4.5. The form it takes when it is actually carried out

The form ESC takes when it is finally integrated into the formal and non-formal education systems in Tanzania and Indonesia as a result of the ISP project cannot be analyzed at this point. This will be a central aspect of the final monitoring and evaluation of the ISP project.

4 Overall conclusion

Transformation of educational systems to include new knowledge and skills is a complex process involving "top-down directives" as well as "bottom-up" experience and insight. The phases which changes in curricula and social learning processes go through before they are firmly rooted in practice are time consuming. The Institutional Strengthening Project has tried to catalyze this process by providing a framework for action and by offering feedback and support from specialists and stakeholders along the way. The pilot project has, so far, achieved much of what it set out to do.

The research and the roundtables documented that there are a very large number of policies and initiatives in the countries circling around the ideas of sustainable consumption and sustainable living. The challenge which the ISP project seems to be helping the participants consider is how ESC can be a bridging link between these various initiatives.

In order to overcome the difficulties encountered in relation to disciple-specific biases in the research and the recommendations, partnering two implementing partners in each country might be a solution. One partner would need to have expertise in education, the other in environmental issues.

The time frame of the project has clearly been too limited. A longer period for research and review and more opportunities than one single roundtable for discussion about national perspectives on ESC need to be arranged for should the project be repeated in the future. The policy documents and strategies should identify and underline the importance of holistic approaches to learning about the interdependent systems and processes of the modern world.

Sustainable lifestyles are beneficial to people's well-being and are not necessarily a question of sacrifices (14). Sustainable consumption is not only a frightened response to climate change but is a pathway towards other socially desirable outcomes. Realization of this represents a paradigm shift for some educators and policy makers. Such a shift is dependent on discussion, experience and evaluation. In a field like education which already has many tasks to accomplish it is important that spaces and resources to facilitate such a shift are provided. The ISP project appears to have succeeded to initiate this process in the countries involved, but whether the project can lead to significant, lasting changes remains to be seen.

References

- 1. UNDP, (1998). Human Development Index, Oxford University Press, Oxford.
- 2. Official Chair summaries from the U.N. Commission on Sustainable Development 18 and 19 (2010/2011), from the European Parliament (June 2011).
- 3. UNDP, (1998, 2011). Human Development Index, Oxford University Press, Oxford.
- 4. Marrakech Task Force for ESC, (2010) ESC- An Innovation Brief, Hamar, Norway.
- 5. UNEP, (2010). Here and Now! Education for Sustainable Consumption, Paris, France.
- 6. OECD, (2009). Promoting Consumer Education, Trends, Policies and Good Practices. OECD Publishing, Paris, France.
- 7. IGES, (2012) http://enviroscope.iges.or.jp/modules/envirolib/view.php?docid=3284 .
- 8. UNESCO, (2009). Review of Contexts and Structures for ESD, UNESCO Publishing, Paris, France.
- 9. Amadeo, J.A., Torney-Purta, J., Lehmann, R., Husfeldt, V., and Nikolova, R. (2002). Civic knowledge and engagement: An IEA study of upper secondary students in sixteen countries. Amsterdam: IEA.
- 10. UNEP, (2011). Global Survey on Sustainable Lifestyles, Visions for Change, Paris, France.
- 11. UNEP, (2010). Here and Now! Education for Sustainable Consumption, Paris, France. page 10
- 12. Goodlad, John I.(1994); Educational Renewal: Better Teachers, Better Schools; Jossey-Bass Publishers; San Francisco, USA.
- 13. UNEP, (2011). Institutional Strengthening Project documents.
- 14. Holmberg, John; Larsson, Jørgen; Nässen, Jonas; Svenberg, Sebastian; and Andersson, David; (2012). *Low-carbon transitions and the good life*; Swedish Environmental Protection Agency, Stockholm, Sweden.