

HERE and NOW!

Education for sustainable consumption

Recommendations and Guidelines



A publication from the United Nations Environment Programme and the Marrakech Task Force on Education for Sustainable Consumption led by Italy

in collaboration with the United Nations Decade on Education for Sustainable Development and the Hedmark University College in Norway



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Education for Sustainable Consumption
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Despite increased awareness of the human impact on the environment and a greater focus on personal as well as global consequences of individual lifestyle choices, sustainable development and sustainable consumption are still not central topics in educational systems today. *Here and Now! Education for Sustainable Consumption* is a compilation of recommendations and guidelines organized into two main chapters:

(I) “*Addressing the challenges*”: is meant for policy-makers and contains rationale for education for sustainable consumption, including suggestions for action plans;

(II) “*Optimizing opportunities*”: is aimed at educational authorities, teacher trainers, teachers and educators. This chapter contains core curriculum suggestions;

Annexes to *Here and Now!* Have been developed to present an overview of ‘Relevant Resources’ and teaching materials providing references to theoretical research and practical materials, as well as web links. These annexes are available online at <http://www.unep.fr/scp/education> as a separate document.

The purpose of *Here and Now!* is:

- 1) to provide policy makers with an instrument to understand the importance of Education for Sustainable Consumption in supporting other policy goals such as citizenship and democratic participation, environmental protection or energy and climate policies.
- 2) to give policy makers guidance on how to integrate ESC into existing educational and sustainable development strategies
- 3) to provide educators with tools and instruments in order to include ESC in curricula.

Here and Now! focuses on education within the context of formal education and although life-long learning and professional training are fundamental aspects of education for sustainable consumption they are not specifically addressed here.

Overall we hope *Here and Now!* will contribute to increase:

- ethical reflection
- curriculum commitment
- interdisciplinary cooperation
- active student-related learning
- change in attitudes and behaviour.

The two main chapters of this publication have a common goal but it is expected that they will also be used separately. Some repetitions in the definition of ESC and other key concepts are therefore intentional and meant to allow each chapter to stand on its own.

Education for sustainable consumption is an important part of the UN Decade for Education for Sustainable Development. *Here and Now!* has been prepared at the request of UNEP with the support of the Marrakech Task Force on Education for Sustainable Consumption¹

¹ **The Marrakech Task Force on Education for Sustainable Consumption** was launched during the 14th Session of the United Nations Commission on Sustainable Development (CSD14 - New York, May 2006). Education is considered an essential tool to ease the shift towards more sustainable patterns of consumption and production and the Task Force focuses on introducing sustainable consumption and production issues into formal curricula. The thematic scope of the Task Force is to identify formal education tools and strategies, and accompanying measures to ensure the effectiveness of national/regional policies. The areas of action for the Task Force are: policy, regulatory and operational frameworks: support the introduction of education for sustainable consumption into formal curricula and into thematic/sectoral policies (as, for example: energy, waste, transport, agriculture, etc.) The Task Force focuses also on the creation of competences and skills on sustainable consumption at all levels within the sector of decision making, education and training processes, and capacity building by planning educational actions on specific thematic issues. Education for sustainable consumption is considered by the Task Force to be a broad issue involving different subjects, with the perspective of the life-long learning process, and considering the role of corporate, social and environmental responsibility.

led by the Italian government and of UNEP in order to realize concrete actions towards fulfilling the recommendations of the Johannesburg Plan of Implementation related to the development of a 10 years framework of programmes for sustainable consumption and production. The content of *Here and Now!* was drafted in close collaboration with and tapping into the extensive expertise and work of the Consumer Citizenship Network² and other educators from around the globe³.

Here and Now! recognizes that sustainable consumption requires rethinking definitions of human needs and desires. Sustainable consumption encompasses the principles of moderation and sufficiency as means of curbing social, economic and environmental imbalances and of stimulating responsible citizenship. Sustainable consumption is founded on the principle of the oneness of humanity and the right of all to have their basic needs met. It is also evident that incorporating the concept of responsible consumption into daily actions is a process and must be developed and modified over time.

Education for sustainable consumption consists of the acquisition of knowledge, attitudes and skills necessary for functioning in today's society. It is responsibility learning which aims to contribute to the individual's ability to manage his own life while also participating in the stewardship of the global society's collective life. Although the contexts and methodology used in education for sustainable consumption may vary, there are many common learning outcomes and competences. Identifying competences and outcomes is an ongoing process which needs to move in tact with the changes in society.

Victoria W. Thoresen

² **The Consumer Citizenship Network (CCN)** is an interdisciplinary network of educators, researchers and civil society organizations, who recognize the pressing need for constructive action by individuals in order to achieve sustainable consumption and global solidarity. The Consumer Citizenship Network (www.hihm.no/concit) has, since 2003, developed interdisciplinary approaches to central issues dealing with the balance between material and non-material well-being and with how one can translate ethical values into everyday practice through conscientious participation in the market. CCN also brings together expertise in the fields of citizenship-, environmental- and consumer education to further develop research and good practice for teaching and accessing consumer citizenship education. The Network consists of 136 institutions in 37 countries. The project targets lecturers, researchers and teacher trainers in higher education; students, professionals working with children and young people, public authorities, and associations dealing with citizenship training, sustainable development and consumer issues... By focusing on social responsibility, the CCN addresses the growing international concern for implementation of norms and behaviour which support sustainable development and cooperation.

³ This includes participants of the Workshop on education for sustainable consumption held at the 4th **International Conference on Environmental Education** i Ahmedabad, Nov.2007

1. Addressing the challenges

Here and Now! urgently calls upon policy makers and educational authorities around the world to honour the commitments already made during the series of United Nations conferences and declarations, and to give education the necessary means to fulfil its role in achieving a sustainable future. In doing so it is essential that education for sustainable consumption be incorporated as a significant dimension in education for sustainable development.

1. Why sustainable consumption?

1.1. *The present situation*

Many factors have contributed to the need for sustainable consumption here and now. Environmental degradation, whose primary driving forces are population, consumption and technology, has reached proportions which require immediate action. Poverty remains rampant in large parts of the world. Consumption in some parts and by some people's consumption increases at the expense of others due to disproportionate distribution. Through the globalisation of media, the portrayal of materialistic lifestyles of the most affluent groups in society is influencing attitudes and consumption patterns globally. Peace and security remain unstable as battles continue to be waged over access to natural and human resources. The complexities of integration and social cohesion in increasingly multicultural societies are compounded by the lack of access by many to consumption which fulfils their basic needs. Marginalization of individuals and groups is on the rise. Economic difficulties due to financial overextension and dependency increase. Crime is on the rise. Physical and mental health problems related to lifestyle choices have become global concerns.

1.2. *The challenge*

The overriding challenges related to sustainable consumption are:

- to respect the earth and life in all its diversity;
- to care for the community of life with understanding and compassion;
- to adopt patterns of consumption and production which safeguard human rights and community well-being as well as the regenerative capacities of the earth and to ensure that economic activities at all levels promote human development in an equitable and sustainable manner.⁴

More specifically, these challenges involve participating in the ongoing values debate about quality of life; developing critical analysis of information; controlling the human impact on nature; preventing life-style related illnesses; exercising social responsibility; and maintaining public discourse in order to guarantee accountability.

1.3. *The principles*

The safeguarding of basic values of honesty, integrity, compassion, justice, freedom and peace against the dominance of greed, fraud, excess and violence is an essential principle of sustainable, responsible consumption. Another relevant principle is the efficient and wise use of the earth's resources in order to secure the basic human requirements for existence, the highest quality of life and equitable social and economic development.

Sustainable consumption involves rethinking definitions of human needs and desires. It encompasses the principles of moderation and sufficiency as means of curbing social, economic and environmental imbalances and of stimulating responsible consumption.

Sustainable consumption is founded on the principle of the oneness of humanity and the right of all to have their basic needs met. It is also evident that incorporating the concept of responsible consumption into daily actions is a process and must be developed and modified over time in response to changes in society.

1.4. *The process*

The World Commission on Environment and Development stated already in 1987 that: "Sustainable development requires changes in values and attitudes towards environment and development—indeed, towards society and work at home, on farms, and in factories..."⁵

The United Nations Conference on Environment and Development (The Earth Summit) held in Rio de Janeiro in 1992 initiated the Rio Action Plan known as Agenda 21 which was an appeal for global partnership in order to deal in a more balanced manner with development issues. It called upon governments to adopt national strategies for sustainable development.

⁴ The Earth Charter, <http://www.earthcharter.org>

⁵ Our Common Future, WCED, (1987), Oxford; Oxford University Press p. 111

The World Summit on Sustainable Development in Johannesburg 2002 “reaffirmed the commitment to sustainable development and to building a humane, equitable and caring global society, cognizant of the need for human dignity for all” which had been delineated at the Earth Summit. The Johannesburg Plan of Implementation, signed at the UN World Summit on Sustainable Development (WSSD) in 2002, calls upon all governments to take action to “change unsustainable patterns of consumption and production”⁶

In order to accelerate such a shift, the Johannesburg Plan invited everyone to promote the development of a 10-year framework of programmes on sustainable consumption and production. The collective international effort to develop the 10-year framework of programmes is named the “Marrakech Process” after the city where its first gathering took place (2003). To contribute to the process, UNEP proposed to develop a system of Lead Countries and technical “Marrakech Task Forces” to address specific issues. Italy took the leadership of a Task Force on Education for Sustainable Consumption⁷ with the aim to contribute to the development and reinforcement of sustainable consumption and production patterns by focusing on education as a tool of implementation both in a long and short term perspective⁸. The main objective of the Task Force on ESC, is to focus on the role of formal learning processes in providing knowledge, awareness and competences aimed at enabling individuals and social groups to be the key actors of change towards more sustainable consumption behaviour.

⁶ Johannesburg Plan (Chapter 3)

⁷ The Task Force on ESC was launched during the 14th session of the UN CSD (New York, 1-12 May 2006) - Economic and Social Council Official Records, 2006, Supplement No. 9, E/2006/29 E/CN.17/2006/15 paragraph 132

⁸ Other Marrakech Task Forces are focussed on sustainable lifestyles, tourism, products specifications, building and construction, etc.

2. Why education for sustainable consumption?

2.1. The present situation

Today, education is being redesigned in terms of how to prepare people for life: for job security; for the demands of a rapidly changing society; and for technological changes. Numerous aspects of education for sustainable consumption (ESC) are already taught but there is a general lack of 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.

2.2. The challenge

The main challenge in relation to education for sustainable consumption is how to support initiatives which stimulate the individual's awareness of the central role they play in forming society and empower them to choose responsible, sustainable lifestyles. This involves providing opportunities for learning about the systems and processes connected to consumption. It also involves relearning and reorganizing information in wider contexts. It is contingent on reconsideration of such central questions as the value of material and non-material prosperity, and the significance of service to one's fellow human. The present situation indicates the need for the further development of analytical, reflective thinking skills in order to decode the extensive and aggressive commercial messages to which individuals around the world are constantly exposed. Education for sustainable consumption should be an instrument for ensuring awareness of consumer rights. The challenges are for proactive measures as well as protective ones. They encompass helping individuals learn how to function as citizens who not only make selective, reflected lifestyle choices in the market but who also effect changes by seeking creative new solutions and engaging as stakeholders in the dialogues and debates which determine policy.

2.3. The principles

Education for sustainable consumption is founded on the concept of sustainable consumption which is based upon the principles of sustainable development. Education for sustainable consumption consists of the acquisition of knowledge, attitudes and skills necessary for the individual to responsibly manage his own life as well as participating in the stewardship of the global society's collective life. Formal and informal education as well as lifelong learning should be arenas for education for sustainable consumption. It can be taught both as integrated aspects of existing subjects or as specific themes, courses or studies. The contexts and methodology used in education for sustainable consumption should vary in order to fit particular conditions. There are, however, many common learning outcomes and competences. Identifying these competences and outcomes is, in principle, an ongoing process which should continue as changes occur in society.

2.4. The process

The origins of education for sustainable consumption lie in the development of environmental education (which highlighted the interrelatedness among people, cultures and the ecosphere) and consumer education (which focused on the rights and responsibilities of the consumer).

The United Nations Conference on the Human Environment in Stockholm in 1972 laid the groundwork and led to the establishment of the United Nations Environment Programme and the International Environmental Education Programme (IEEP). A significant outcome of the IEEP was the Belgrade Charter which called for educational policies which would assist individuals to adjust their own priorities and assume a personal and individualized global ethic which would reflect in their daily behaviour. This was followed by the World

Commission on Environment and Development. Meanwhile the adoption of a declaration of consumer rights in 1985 by the United Nations also confirmed the importance of consumer education. The Rio Action Plan of 1992 focused to an even greater degree on education for sustainable development in its Agenda 21 programme. Holistic, integrated educational approaches were encouraged then and as part of the Millennium Development Goals adopted by the U.N. General Assembly in 2000.

The World Summit on Sustainable Development in Johannesburg called with even greater urgency for education for sustainable development and in 2005 the U.N. Decade for Education for Sustainable Development (DESD, 2005-2014) was initiated. The DESD is coordinated by UNESCO. Complex as the Decade is, its conceptual basis, socio-economic implications, and environmental and cultural connections make it an undertaking which potentially touches on every aspect of life. The overall goal of the DESD is 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. The DESD recognizes that achieving more sustainable consumption patterns requires both business practices and government policies that broaden the range of choices and guarantee clear and reliable information open to consumers to make environmentally and ethically sound decisions. Education plays a particularly important role in catalyzing this process. Education for sustainable consumption is intended to enable students to take informed and responsible decisions and actions, now and in the future.

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3. How can education for sustainable consumption be achieved?

3.1. A roadmap of recommendations

Education for sustainable consumption involves action on several levels. It consists of providing learning environments in which deeds, not only words, support the goals of ESC initiatives. It means creating structural frameworks within which ESC can be carried out. It is also dependent upon the systematic training of teachers and the development of relevant research.

In a concerted effort to address the interdisciplinary issues of equitable, sustainable consumption and production, governments are urged to:

1. *Ensure* that education institutions reflect in their daily management the priorities given to sustainable development
2. *Include* themes, topics, modules, courses and degrees about education for sustainable consumption in established curriculum.
3. *Encourage* research in education for sustainable consumption-related areas.
4. *Strengthen* connections between researchers, lecturers, teacher trainers and socio-economic actors and stakeholders.
5. *Enhance* cooperation between professionals from diverse disciplines in order to develop integrated approaches to education for sustainable consumption.
6. *Facilitate* teaching and teacher-training which strengthens global, future-oriented, constructive perspectives within education for sustainable consumption.
7. *Reward* creative, critical, innovative thinking related to education for sustainable consumption.
8. *Ensure* that education for sustainable consumption respects the importance of indigenous knowledge and recognizes alternative lifestyles.
9. *Foster* intergenerational learning as an integrated aspect of education for sustainable consumption.
10. *Provide* opportunities for practical application of theoretical study through social involvement and community service.

Progress towards sustainable development can also be significantly enhanced by encouraging all primary and secondary schools to provide education for sustainable consumption for a minimum of a minimum of one hour a week each year for all grades over the coming ten years. A weekly hour which is earmarked ESC can either be a part of existing classes or as interdisciplinary themes and projects or as separate sessions in addition to existing classes. It is important, however, that ESC be identifiable so as not to disappear from focus. More intense learning would be expected in informal education settings and at institutions of higher education.

Education for sustainable consumption is, by definition, a form of education which evolves and requires modification and updating. Many of the topics which today are central to education for sustainable development were topics which were not imagined fifty years ago. By sharing good practices, establishing indicators of progress and implementing mechanisms for monitoring, governments can follow and facilitate the development of education for sustainable consumption in their country.

Further suggestions for implementation of the above mentioned recommendations can be found under “*Optimizing Opportunities*” which constitutes part of this compilation.

3.2. Timeframes

Accomplishing the above-mentioned recommendations within the coming four years and before the end of the Decade of Education for Sustainable Development in 2014 constitutes a vital contribution to education for sustainable development.

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2. Optimizing Opportunities

“Optimizing Opportunities” is the second chapter of *Here and Now! Education for Sustainable Consumption*. It contains descriptions and definitions of ESC as well as suggestions on how to implement the recommendations presented previously. “Optimizing Opportunities” includes guidelines for an ESC core curriculum. Numerous examples of how various countries have dealt with ESC are also provided. This chapter has been prepared to assist policy-makers and curriculum developers in the task of integrating ESC into education on all levels.

Advancing Sustainable Societies through Education for Sustainable Consumption

Education for sustainable consumption is directly linked to many central issues of society today and deals with challenges facing individuals everywhere, irrespective of the level of consumption and production of the country in which they live. The following list describes some important connections.

- ESC is an excellent starting point for education for sustainable development since it deals with issues young people are concerned with in their everyday life such as identity, food, energy, water, housing, transportation, communication, work, fashion, entertainment, tourism, etc.
- ESC is a means of developing human resources and encouraging reflective, critical and active citizens who are capable of making informed choices.
- ESC is a key to dealing with the many changing issues which appear on the agenda of the modern society related to individuals and their lifestyle choices.
- ESC is part of the on-going values debate to define the “quality of life”.
- ESC is a moral obligation and an important dimension of social responsibility.
- ESC is an essential element contributing to sustainable development⁹.
- ESC is a means of promoting a dignified standard of living for everyone.
- ESC is about learning to consume differently and efficiently.
- ESC is a way of learning how to gather, assess and use information.
- ESC is a crucial part of the development of mental and physical health.
- ESC is a vital vehicle for mitigating climate change.
- ESC is a way of contributing to the preservation of biodiversity.
- ESC is an instrument for ensuring awareness of consumer rights.
- ESC is an important part of family management and a central subject for intergenerational learning.
- ESC is a means of preventing over-indebtedness and financial dependency.
- ESC is a tool for stimulating creative responses on the individual level to social, economic and environmental challenges.

⁹ For more information about sustainable development and education for sustainable development see: Education for Sustainable Development Toolkit No.1-2006, UNESCO Education Sector

1. Implementing Education for Sustainable Consumption

Our lifestyles have a distinct impact on the environment, just as the choices we make affect the lives of other people around the globe. As the United Nations Development Program stated ¹⁰

“Consumption clearly contributes to human development when it enlarges the capacities and enriches the lives of people without adversely affecting the well-being 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.”

Changing consumption patterns is dependent upon acquiring an understanding of the symbolic value of services and commodities, insight into the systems and processes which produce and market commodities and services, awareness of the impact our lifestyles have on the world around us, and development of skills which will help individuals become informed, reflective and responsible consumers

1.1. Ensuring the principles by setting examples

The practical, daily decisions made in offices, schools and private homes can set the stage and provide encouraging examples of sustainable consumption to teachers and students. These decisions are made after having clarified the values and principles one stands for and considered how to manifest these in action. Small initiatives affirm the principles of sustainable consumption. They emphasize the applicability of ESC. They underline the importance of starting *here and now* to change our habits. They also confirm the fact that sustainable consumption concerns everyone who is interested in actively contributing to sustainable development.

Green Schools in China	China
<p>China's <i>Green School Project</i> is an initiative of the Ministry of Education of China (MOE) and is funded by the State Environmental Protection Administration (SEPA). China's <i>Green Schools Program</i>, which started in 1996, is based on the international concept of ISO 14000 and has been informed by the European 'Eco-schools'. Since 2000, it has been run by the Centre for Environmental Education and Communications (CEEC) and their local networks. The program's key focus areas include whole-school environmental management and protection, EE curriculum and professional development, and greening of school grounds. Schools must undertake a series of steps before applying for Green School awards. Awards are categorised through a staged development process, starting at municipal, provincial and then national levels. 15000 schools have received at least one level of this award. The <i>Green School Project</i> focuses on the building of skills and knowledge for environmental management on school grounds and the wider environment.</p>	
<p>http://www.aries.mq.edu.au/pdf/international_review.pdf</p>	

The Gobar Times Green Schools Programme (GTGSP)	India
<p>The Gobar Times Green Schools Programme (GTGSP) involves the inspection/survey of a school's environmental practices by its students. This process is termed an environmental audit, and is done using the Green Schools Manual. It incorporates interesting exploratory activities, whereby students go around the school and collect information about the use and management of resources like energy and water, and the disposal of waste. Collection and interpretation of the information/data helps students appreciate key environmental issues. The Green Schools Manual is divided into five chapters -- water, air, land, energy and waste. On the basis of the data collected, students give points for each activity and compile the final scores for individual chapters. The result is a 'report card' of the school's environmental practices prepared by its own students. The only difference is that instead of English, Maths and History, the subjects range from water, air, to energy use. As a result of this exercise the school can figure out where it stands on the environmental sustainability index. It can also identify areas of improvement so that it fares better next year.</p>	
<p>http://southasia.oneworld.net/article/view/156319/1/</p>	

¹⁰ UNDP, Human Development Index 1998, Oxford University Press, Oxford.

1.2. Including ESC in established curricula

ESC cannot be expected to completely transform consumption habits but education can contribute significantly to the process. By making ESC obligatory for all students in formal education and accessible for students in informal education, the basis for widespread changes can be laid. Experience indicates that there are various approaches to integrating ESC in educational systems. In an attempt to assist policy makers and curriculum planners in choosing how to include ESC in their school systems, several alternatives are presented here. The alternatives mentioned are not exclusive. One can be used or a combination of more than one, if desired.

a) ESC can be **mainstreamed as a topic** taught as a part of existing subjects/disciplines. This requires that teachers clarify the interrelatedness of ESC to the subject they teach as well as ESC's connection to other subjects. It means that schools need to identify and maintain an overview of which aspects of ESC are covered by which subject and when they are taught in order to ensure that ESC does not become fragmented or disappear in between the other requirements of the curricula. To help with this, a matrix is provided in Document #3 "Relating the resources".

b) ESC topics can be **taught as a cross-cutting interdisciplinary theme** and/or incorporated into projects and other activities as well as in school clubs and after school activities. Because of the very nature of ESC, thematic teaching is an often used approach. It allows for an issue to be viewed from diverse perspectives. Thematic teaching also goes well with practical activities and projects which aid in making abstract knowledge and theory more concrete and connected to the pupils' everyday life.

c) ESC can also be **integrated into the curriculum as a specific subject**, taught in specific periods in schools. These periods can be regular (once a week, once a fortnight, etc) or concentrated in larger periods less occasionally throughout the school year. Subjects of this kind are not always called ESC but they have the same goals and contain the contents of ESC. Such subjects fall under the categories of: "global citizenship", "future studies", "life skills", "stewardship of the earth", etc.

The Green Schools Bara	Madagascar
<p>The Green Schools Bara is a sub-project of the Integrated Rural Development Project in the Bara-Region and works in the central south and south-west of Madagascar. The Green School Programme has five main subjects: gender, inclusive education, good governance, cooperation and green education. Green Education is an integrated education that includes all subjects. The heart of the matter is an education about the interplay of all life, the sustainable use of natural resources and the respect for and love to all creation. This requires "integrated teaching" that makes the interdependence between the single human being, the community and the surrounding ecological system obvious. Green Education fits to everyone, young and old people in urban and rural areas, and its success depends on the choice of the right methods and suitable materials, and its optimal adaptation to local conditions. Among other things students learn through practical activities about clean schools, tree nurseries, solar energy, botanical paths, compost, and school gardens.</p>	
<p>www.smbara.org</p>	

The European Diary, Wise Choices?	International
<p>The European Diary is an interdisciplinary, thematic approach to numerous topics including ESC which can be integrated into lessons of many different subjects. The Diary describes the social, economic and environmental consequences of young people's actions. The annual diaries and their accompanying teacher guidelines have been adapted, translated and used in 19 European countries since 2004 and are based on feedback from teachers across the European Union. The texts provide basic facts but also raise questions for students to think through themselves. The materials provide exercises to test students' understanding, issues for student discussion, suggestions for research projects that can be carried out either in the classroom or as homework assignments, and web addresses to which students can refer for more in-depth information.</p>	
<p>www.generation-europe.eu.com</p>	

1.3. Encouraging research

Sustainable development in a constantly changing global society is not an easy concept to define. Defining sustainable consumption is equally challenging, if not more so. "Research has already begun to generate knowledge about how to move toward a more sustainable global future. However, these insights have been primarily related to questions of sustainable production. There has been considerably less emphasis devoted to charting the transitions necessary to foster sustainable consumption and this previously neglected dimension still requires comprehensive investigation. Such research must systematically integrate efforts to promote improvements in quality of life, to distinguish long-term structural trends in consumption patterns, and to identify the social mechanisms and cultural aspects of consumer behaviour and household decision making."¹¹ Comprehensive research can strengthen the foundation for what is taught in ESC by providing insight into consumption's varied impacts on different environments and about how different cultures accept or reject particular changes. Thus, research needs to examine a diversity of approaches to sustainable consumption based on different social, economic, geographic and cultural conditions.

There is also a pressing need for more systematic investigation focusing on how to teach ESC. Which pedagogical approaches are preferable in given cultures and situations? What topics should be emphasized and which should be left to parental guidance, religious instruction or legislative intervention? How can scientific data, impact assessment indicators, etc. be best understood and used by students? These are a few of the many issues which research on ESC can and should address.

Research and evidence on sustainable consumption	U.K.
Defra (The Department for Environment, Food and Rural Affairs) has established a programme of research on sustainable consumption (by individuals and businesses) as part of the development of policy and delivery of the Government's aims on sustainable consumption and production. The Advisory Group on Sustainable Consumption and Production Evidence is providing advice on research and evidence building. Current research projects into sustainable consumption include: an evidence base to support the Environment Direct service; a review of Environmental Action Fund projects; and a critical review of data for environmental impacts of household activities. To access information on the research programme, visit the sustainable consumption and production research pages on the Defra website. http://www.defra.gov.uk/environment/business/scp/	

Research Networks dealing with ESC	International
As with other disciplines and topics, education for sustainable consumption requires pedagogical competence on the part of the teacher. This is particularly true as sustainable consumption is an interdisciplinary subject which can be dealt with from a wide variety of perspectives. Research into the didactics of ESC has only begun to produce results which can be applied in the classroom. The Consumer Citizenship Network (www.hihm.no/concit), the International Federation of Home Economics Teachers (www.ifhe.org), The Children's Identity and Citizenship in Europe Network (http://cice.londonmet.ac.uk), and SCORE (the Sustainable Consumption Research Exchange Network (www.score-network.org)) are the main groups presently involved in research specifically focusing on ESC. Consumers International (www.consumersinternational.org) has supported work related to consumer education around the globe but noticeably in Latin America (ROLAC network) and in the Asian Pacific Region. Some of these initiatives have involved research on ESC.	

¹¹ Oslo Declaration Feb. 2005

1.4. **Strengthening connections**

A wide variety of partners (governmental and civil society organizations, media, etc) exist with which educators can cooperate in order to improve the quality of the education for sustainable consumption. Building coalitions and partnerships between individuals and organizations working on issues of sustainable consumption can provide up-to-date bases of expertise upon which teachers and students can draw. It can contribute to the process of bringing ESC out of the classroom and into life outside of school. Connections can be established online as well as face to face. Such partnerships can stimulate initiatives within the local community.

Teaching together	Kenya
<p>A wide variety of civil society organizations contribute to ESC. In Kenya non-governmental organizations such as Consumers' Voice, Consumer Unity and Trust Society (CUTS-International) and Youth Education Network have cooperated with universities such as Kenyatta University and Nairobi University in presenting courses on consumer issues. Among them are courses dealing with "consumers role in sustainable consumption". Over several years, this cooperation has also resulted in a series of television and radio programs as well.</p>	
<p>www.yenkenya.com</p>	

Cooperation with civil society	Europe
<p>ANPED, Eco Forum and EEB as well as other national and international NGO's are prepared to cooperate as partners in concrete national and international projects towards sustainable consumption and production. In addition, they would provide reliable public information and education but also ensure accountability of those with the power to make policy and the rules for society and to guarantee transparency about successes and failures on the way to improve the quality of life for everyone. They will cooperate on: Education for sustainable consumption and production via (i) integrating knowledge of relevant consumption behaviour into curricula from pre-school to universities and in the concepts of life long learning; (ii) providing data for reliable information; (iii) report on indicators to shape consumption behaviour that can make a difference.</p>	
<p>Ostend NGO Statement towards Sustainable Consumption and Production Patterns, EU Stakeholder Meeting 24.-26.11.2004 (www.anped.org/media.php?id=244 -)</p>	

1.5. *Enhancing cooperation*

Students need training in how to define issues; gather, handle and apply relevant information; consult; plan courses of action; make choices; analyse and assess the consequences of their actions, and reflect upon the effect they have made locally, nationally and in a global context. This is particularly true in their roles as consumers.

Education for sustainable consumption is interdisciplinary – elements are to be found in different subjects of the curriculum. Central topics of environmental education, consumer education and civic training provide the backbone of education for sustainable consumption. Being a holistic topic dealing with all aspects of everyday life, ESC needs to develop integrated approaches that reflect the wholesome characteristic of life in general. It should highlight the connectedness and interdependency of the diverse aspects of our daily actions. Establishing a common understanding of ESC amongst teaching staff facilitates interdisciplinary cooperation and makes mainstreaming ESC in established subjects easier.

Environmental education has commonly fallen under the auspices of natural sciences. Consumer education has traditionally been handled by those in domestic sciences or home economic departments who teach handicrafts and food sciences. Civic training has generally been relegated to the social sciences. If ESC is to deal with relevant topics in the socio-cultural context of each school then close cooperation between teachers of different disciplines is required. Whether or not ESC is taught as an integral part of existing classes, as a cross-cutting theme, or as a specific learning session, sharing responsibility for teaching ESC will prevent fragmentation of the subject area.

Teaching and Learning for a Sustainable Future	<i>International</i>
<p>As with issues of citizenship and health, consumer education is a key cross-curricular theme for student learning. Traditionally, consumer education was seen as the study of prudent shopping habits, family budgeting, and ways of avoiding advertising and credit traps. However, consumerism touches on all aspects of daily life in the modern world and might be seen as a core value in the North and, increasingly, throughout the South as well. Indeed, mass consumption is now entrenched as one of the key defining processes of economic and social life around the world in contrast with the values of sustainability that are characteristic of indigenous communities. This module explores key issues in consumerism as a part of contemporary life. It also analyses the issues of social, economic and ecological sustainability raised by consumerism, ways in which the impacts of consumption can be reduced, and ways in which issues such as these can be integrated across-the-curriculum.</p> <ul style="list-style-type: none"> -To analyse patterns, causes and impacts of global and personal patterns of consumption; -To appreciate the ethical dimension of reducing the social and ecological impacts of consumption; -To appreciate the importance of changing the patterns and impacts of consumption; -To identify principles of sustainable consumption; and -To analyse examples of educational activities and programmes aimed at encouraging sustainable consumption and identify ways of integrating principles and examples of education for sustainable consumption across the school curriculum. <p>UNESCO: www.unesco.org/education/tlsf</p>	

1.6. *Facilitating ESC in teacher training*

Education for sustainable consumption is an essential part of education for sustainable development. The process of reorienting teacher training to address sustainability is an outstanding challenge facing institutions of higher education.¹² The inclusion of training in education for sustainable consumption is equally essential due to both the present lack of focus on ESC in teacher training and the constantly evolving content of ESC.

To avoid becoming a topic which scares and pacifies students, teacher training for ESC needs to strengthen global, future-oriented, constructive perspectives. It needs to direct the attention of student teachers to existing alternative consumption patterns and lifestyles. Based on up-to-date scientific data, clearly identified values and practical application in real-life situations, ESC can offer student teachers relevant training that they can use throughout their professions.

Needs and Desires	Norway
<p>This course has three basic aims: to increase the student's knowledge of the individual's rights and responsibilities as citizens and as consumers; to acquire practical skills which will help students function as informed, critical and conscientious consumers; and to develop responsible behaviour which encompasses sustainable consumption, active social involvement, ecological responsibility and global solidarity. The course consists of the following sections:</p> <ul style="list-style-type: none"> - Consumption in the past and present - Making choices – practical and ethical aspects of making choices as a consumer - Managing resources – planning, using and protecting resources - Solving problems – diverse strategies for conflict resolution for the consumer - Contributing to the future – change management and social involvement <p>Hedmark University College: www.hihm.no</p>	

Consumer Rights and Human Rights	Thailand
<p>This course has three basic aims: to increase the student's knowledge of the individual's rights and responsibilities</p> <p>The Mahidol University in Bangkok has held courses about Consumer Rights and Human Rights as a part of their International Studies. The topics covered have been: Consumerism : A historical approach; The Consumers' rights movement : A Story of Success and Failure; Consumerism & Globalization; Reactions from corporate business; Government policies and legal procedures (Thailand and International); Restriction of laws and bureaucracy; Consumer movement at the community level; Consumers movement among the middle class; Mass media and citizen participation; Media involvement in consumer protection; Social movement for consumer protection on a food security case study, GMOs; Generating Power as Green Consumers; Human rights as a patients' rights and how is it related to consumers rights; Seminar "Role of Students to Develop Consumer Protection Policies".</p> <p>Mahidol University: www.ciroap.org/ce/index.php?resources=reports</p>	

¹² See: Guidelines and Recommendations for Reorienting Teacher Education to Address Sustainability; UNESCO; Technical Paper No.2-2005

1.7. **Rewarding innovation**

ESC requires in-depth, up-to-date understanding of the changing conditions which create the social and economic landscapes in which individuals function. Though it is highly unlikely that definite answers to all of the questions related to sustainable consumption can be found, it is possible to assist students by providing basic tools which enable them to deal with these questions creatively.

Sustainable consumption is not about returning to the age of the cave man and living primitively, but developing new cultural models of reference. It is about consuming differently and consuming less for some or more for others - depending on where the action is situated. Finding new means of exercising moderation and recognizing sufficiency are central strategies for ESC. Also being able to satisfy basic needs in a safe environment and with respect for basic consumers' rights is sustainable consumption. Stimulating innovation plays an important role in this.

The Globetree	Sweden/UK/International
<p>The Globetree began as a set of activities initiated by the Globe Theater and has grown and expanded to include events involving pupils and teachers round the globe. With children in focus, Globetree works on a scientific basis, using creativity as key tools to mobilize and support children and their teachers in their efforts to improve life and the living environment. One of the central activities is the creation of a Future Vessel a unique manifestation of everyone's concern for the future. The basis of Future Vessel is the two UN-documents Agenda 21 and Right's of the Child (together they are called CREA21) The goal is to promote and practice those documents through the use of creativity. Celebrations, ceremonies, bridges of joy, future meetings, golden keys, globedays, exchange projects, theatre performances, films, books and magazines are some of the many results of the Globetrees activities since its beginning in 1970.</p>	
<p>www.globetree.org</p>	

1.8. **Respecting indigenous knowledge and recognizing alternative lifestyles**

ESC respects diversity of culture and choice of lifestyle. ESC encourages listening to, learning from and caring for knowledge and ways of being which may be different from our own. By doing so, students can learn to reflect on, to see similarities and contrasts between and to gain valuable insights into other ways of understanding and functioning. ESC aims at finding viable solutions built on both innovation and traditional knowledge.

Arctic cooperation	Arctic
<p>A recent international development gaining momentum is the Arctic Environmental Protection Strategy (AEPS), the result of an eight-nation ministerial-level agreement in Rovaniemi, Finland, in 1991. The first program to be set up under AEPS was the Arctic Monitoring and Assessment Program (AMAP), which is documenting the distribution of chronic pollution in arctic waters. The second program was the Conservation of Arctic Flora and Fauna (CAFF), which includes aspects of habitat conservation and indigenous knowledge. The third program, just now getting under way, is the Protection of the Arctic Marine Environment (PAME). Finally, the Emergency Prevention, Preparedness and Response (EPPR) working group has been established. The Inuit Circumpolar Conference (ICC), representing the concerns of all arctic aboriginal people, has developed its own science and technology policy, expressed in the paper "Principles and Elements for a Comprehensive Arctic Policy." ICC calls for a holistic approach to sustainable development in the Arctic that recognizes the rights of indigenous people and that, among other things, requires that development be based on the principle of conservation of marine systems. ICC has observer status within the AEPS and contributes strongly to this and other arctic marine conservation policy developments.</p>	
<p>http://www.carc.org/pubs/v23no1/marine3.htm</p>	

Global Alliance for Cultural Diversity	International
<p>Approved by the UNESCO General Conference on Cultural Diversity at its 31st session and launched in January 2002 by UNESCO's Arts and Cultural Enterprise Division, the Global Alliance for Cultural Diversity is a six-year project (2002-2007) with the purpose of safeguarding and promoting human creativity in all of its varied forms around the world. Creative industries have become the main vehicle by which countries express and export their creativity. Producing a range of products from music and design to arts, crafts and multimedia, these industries are now recognised as a driving force in the world economy and hold great potential for developing economies. Alliance projects are underway in transition countries to unleash the potential of cultural industries and their positive impact on the growth of local economies. For example, the Alliance is encouraging respect for copyright in Colombia, in co-operation with the national Authors Rights Office, by producing a booklet for schoolchildren on the subject and running a public awareness campaign on Bogota's city buses.</p>	
<p>www.portal.unesco.org/culture/</p>	

1.9. **Fostering intergenerational learning**

Education for sustainable consumption is not only an activity for teachers and students alone. It is an important part of informal life-long learning and is carried on in the family, the local community and informal educational settings. It involves bridging gaps between generations by identifying common values, setting goals together and promoting interaction and cooperation at a community level.

Old is Gold!	International
<p>Old is Gold! is a classroom activity used by teachers to raise awareness about the importance of preserving and protecting the cultural heritage; fostering respect for our past; preserving the value of memory in the evolution of the digital environment; favouring intergenerational exchange; making visible the link between cultural diversity and biodiversity, respect for memory and tolerance. The activity catches the students' attention by discrediting the idea that past is boring, and only the future is cool. The concept is developed that we are what we were, and that tradition and progress are not opposites. The key message is that the past feeds the future. Students work in small teams to produce interviews (or photo reportages, comics, short films, etc.), using their grandparents or other older people as 'testimonials'. They discuss differences and similarities in past/present lifestyles and compare different cultural references/tools, kinds of language - way of speaking, idiomatic sentences, etc. - fashion trends, and so on. Sometimes classes arrange a jury or competition with the aim of selecting the best productions (best interview, picture, movie, blog -- online journal, etc.). The best works are used as an example of intergenerational exchange and could be utilised to organise a festival (or other event) involving all school/city's stakeholders (teachers, parents, other students, local authorities, etc.).</p>	
<p>http://www.youthxchange.net/main/oldisgold.asp</p>	

1.10. **Providing opportunities for community service**

Education for sustainable consumption contributes to integration of democratic ideals with personal aspirations by the individual thereby assisting in the evolution of a civilized international market. It involves knowing about and being able to exercise the basic rights and responsibilities of a citizen as well as the specific rights of a consumer. ESC can be taught in part as community-involvement service projects.

ESC is a means of stimulating constructive social activism. The individual is trained to use for example: policy instruments, public consultation, market responses, etc. as instruments with which to initiate change. It is through their personal lifestyle choices and social involvement that they contribute to greater transparency, better policies, and increased advocacy. Informed consumer citizens can be instrumental in the globalization of civil society concerns and can potentially contribute to correcting imbalances.

Eco Citizen Programme	Macaé, Rio de Janeiro, Brazil
<p>The city of Macaé is located in the Campos River Basin, an area responsible for 85% of Brazil's oil production. The advent of oil extraction transformed the urban scene. Many enterprises in the petroleum sector settled in the city and the local population started to suffer from the problems caused by chaotic growth. The growing volume of garbage, tree felling, pollution, chaotic settlement patterns, lack of water, degradation of rivers, the decline in the number of fish, invasions of beaches and mangrove swamps, violence, migration, the impoverishment of the local population, and social exclusion, were problems that threatened the area's sustainable development. Environmental education was considered a preventive action and focused on the practice of ethics and solidarity values within society. Teaching sustainable consumption was an important part of the initiatives. The work was done with integrated themes. Actions were focused on solving problems of garbage on the streets, rivers, and beaches. Three months after the implementation of the Programme, the situation of the urban sanitation was improved on the city's promenade, avenues and its central streets. The city also produced one ton less garbage.</p>	
<p>UN Best practices database: staging.unchs.org/bestpractices/2006/mainview04.asp?BPID=1332</p>	

2. ESC themes

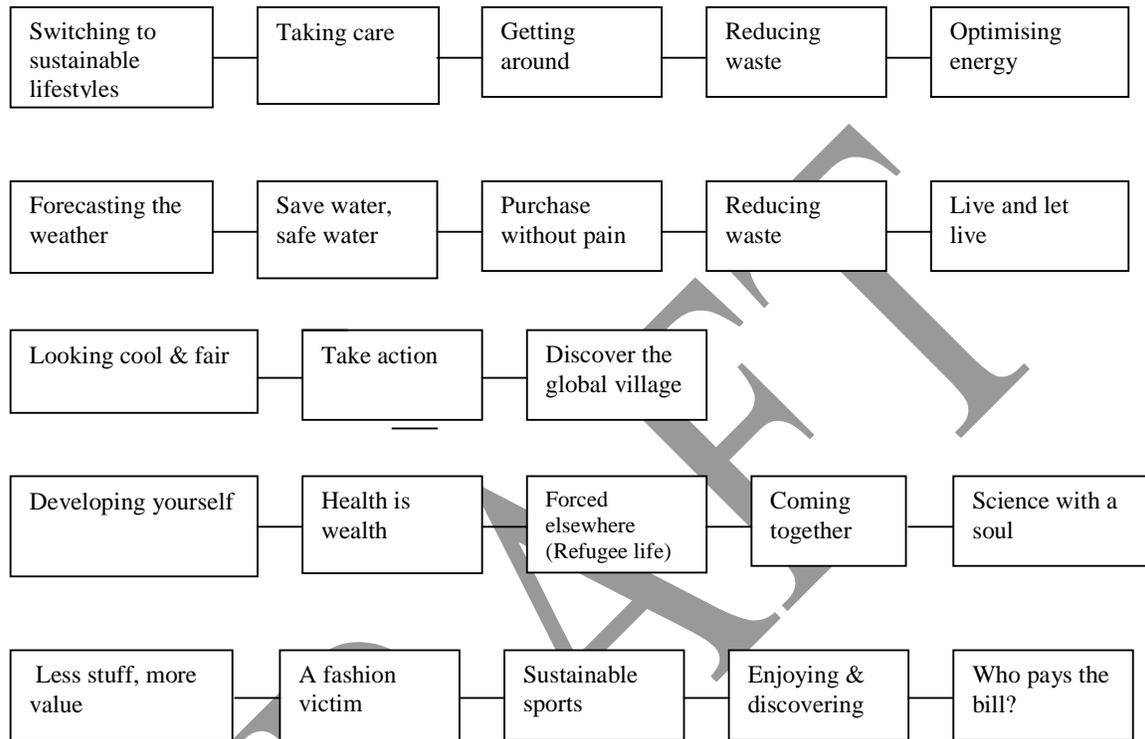
ESC consists of many and diverse topics and issues. The following is a list¹³ of general themes which students should have knowledge of.

2.1. Life quality	2.2. Lifestyles
Values, needs, desires	History of social and economic development
Human rights, ethical codes and spiritual principles	History of consumption
Sufficiency and moderation	Present social conditions
Sustainable development	Present consumption patterns
Sustainable consumption	The symbolic roles of consumption
	The role of the family
	Alternative lifestyles
2.3. Resources	2.4. Economics
Natural	Economic models and practice
Human	Production and trade
Financial	Multinational companies
Technological	Social responsibility
Organizational	Savings, loans, investments
Interrelatedness of systems and processes	Financial services and instruments
Balances and imbalances	E-commerce
2.5. Consumption and the environment	2.6. Consumer rights and responsibilities
Product life cycles and traceability	Laws and norms
Packaging	Agreements and contracts
Recycling, reusing, repairing products	Consumer protection policies
Energy	Transparency/accountability
Housing	Complaints, redress, replacement, reimbursement
Transportation	Conflict resolution
Communication	
Entertainment	
Tourism	
Climate, soil and water protection	
Biodiversity	
Waste management	
Ecological impact	
2.7. Information management	2.8. Health and safety
Digital literacy	Food safety
Media literacy	Gene modified organisms
Advertising and persuasion	Diet and nutrition
Labelling	Ecological, organic food
Peer pressure	Addictives
Data based information systems	Lifestyle illnesses and epidemics
Consumer support agencies	HIV/AIDS
	Social services
	Product safety
	Labeling and quality control
2.9. Change management	2.10. Global awareness
Creativity and innovation	Global interdependence
Future perspectives	Energy, trade, commerce, agriculture, land use
Active citizenship	Poverty
Stakeholder involvement	Human rights
Community service	Labour rights
	Crime
	Precautionary principle
	Fair trade
	Millennium Goals
	World citizenship

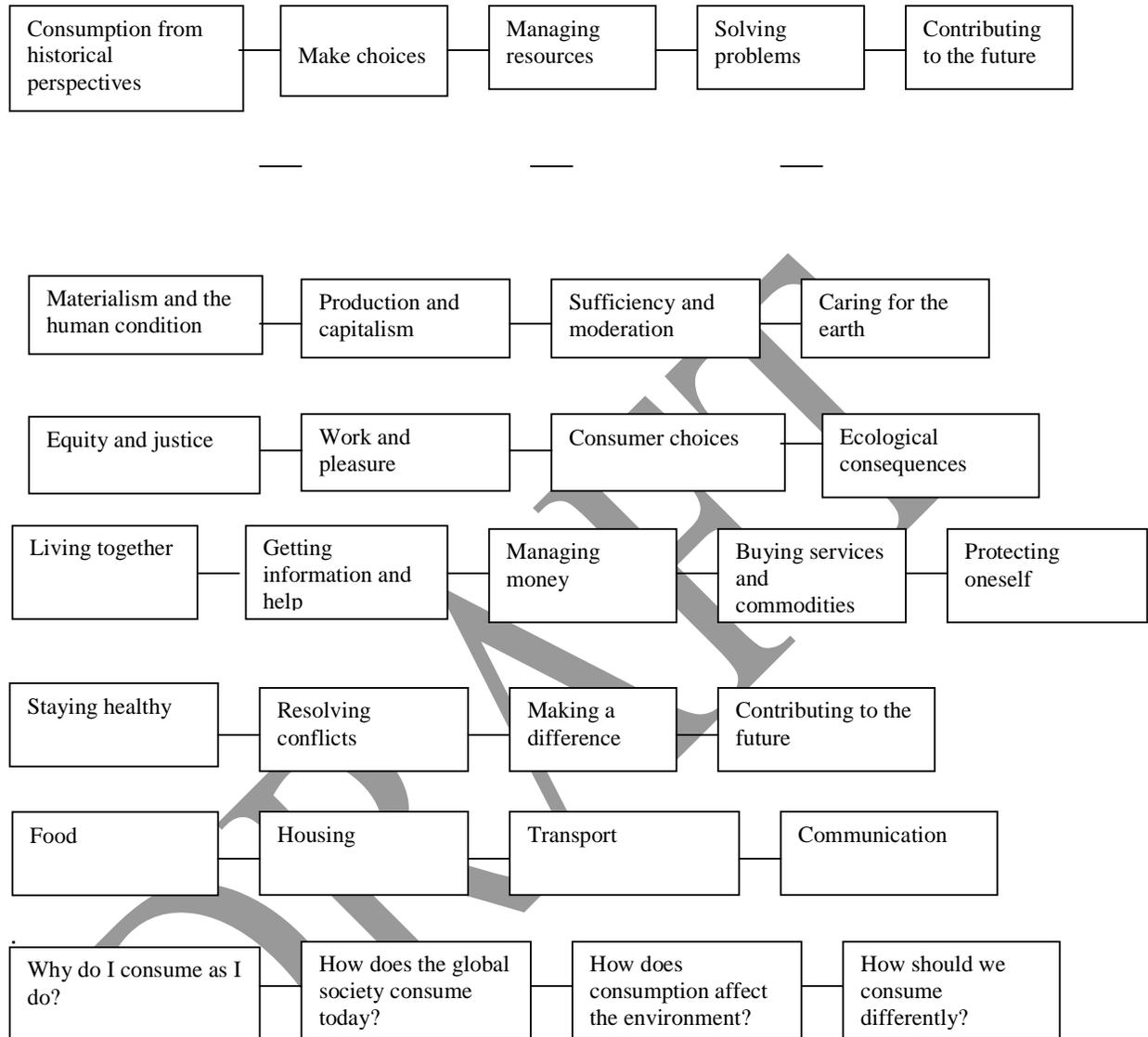
¹³ This list adapted from the Consumer Citizenship Network Guidelines vol.1, 2005

ESC can be presented in many combinations and forms. Below are a few examples of different titles and combinations of descriptions of general ESC themes which teachers can then relate more specific topics to and plan learning activities around.

1. ESC themes as presented in UNEP UNESCO YouthXchange training kit on sustainable consumption (for further reference see section 5.9)



2. ESC themes as presented in existing curricula and literature:



3. ESC learning outcomes and competences

Education for sustainable consumption is an interdisciplinary subject area focusing on contemporary events and conditions. Identifying the various elements is not as easy as examining traditional mono-disciplines which have long histories. One of the main reasons for this is that the technological, social and economic circumstances with which ESC is concerned change rapidly. New issues arise with each new scientific discovery. New social and political constellations require reflection by the students in order for them to understand the interrelationships of processes and systems. This does not mean, however, that ESC is a vague collection of bits and pieces. With its concentration on the role of the individual, ESC deals with how each person interacts with the marketplace, society and environment. The consequences and impacts of individual choices and actions are important elements of ESC.

The **basic learning outcomes** of ESC can be defined as attitudes, knowledge, skills and behavior leading to:

- ✓ Critical awareness
- ✓ Ecological responsibility
- ✓ Social responsibility
- ✓ Action and involvement
- ✓ Global solidarity

More specifically, ESC encompasses the following **generic competences**:

- Appreciation of nature and of human diversity and multiculturalism
- Concern for justice, peace and cooperation
- Self-awareness
- Concern for quality
- Appreciation of the interrelatedness of individuals and society
- Capacity for empathy/compassion
- Ability to make critical, reflected decisions
- Ability to apply knowledge in practice
- Ability to cope with one's emotions
- Information management skills
- Capacity for generating new ideas
- Capacity to adapt to new situations
- Willingness and ability to be of service to others
- Ability to recognize global perspectives

ESC subject specific competences include development of the following attitudes, knowledge, and skills:

1. Ability to define what one considers to be a good quality of life and to be able to identify the values upon which this is based.
2. Realization of the complexity and often controversial nature of sustainable consumption issues
3. Insight into how individual lifestyle choices influence social, economic and environmental development
4. Ability to acquire, assess and use information on the consequences of consumption especially on the environment
5. Knowledge of consumer rights and central consumer protection laws
6. Basic knowledge of the market system and the role of business
7. Knowledge of how the production processes are linked to the consumption system
8. Basic knowledge of the interaction of pricing mechanisms with the consumer's attitudes and behaviour
9. Insight into the practicalities of both the supply and demand sides of production and consumption and their outside-of-the-market relationships to community development
10. Awareness of a commodity's intangible and symbolic characteristics
11. Ability to recognize, decode and reflect critically upon messages from the media and the market
12. Knowledge of social networks responsible for shaping consumption patterns (peer pressure, status, etc)
13. Consciousness of civil society's power to initiate alternative ways of thinking and acting
14. Individual and collective understanding of consumer social responsibility in relation to the corporate social responsibility
15. Ability to manage personal finances (budgeting, saving, investing, taxes, and fees)
16. Ability to manage physical resources (effective control, maintenance, re-usage, and replacement)
17. Knowledge of conflict resolution in general and in particular in relation to consumer related situations such as product safety, liability, compensation, redress and restitution.
18. Ability not only to envision alternative futures but also to create reasonable paths of action leading to these.

4. ESC methodologies

As with most topics, sustainable consumption issues deserve to be analyzed by:

- identifying the problem/condition/challenge;
- recognizing the immediate causes
- finding the underlying causes
- clarifying the principles/values guiding action
- reflecting on one's own experiences
- mapping alternative solutions
- considering initiatives for change
- reflecting on immediate effects
- reflecting on long term effects

There are many ways of making the ESC learning process relevant and interesting. Some methodological examples are given here:

4.1. Relearning

Education for sustainable consumption often reflects the outcomes of past patterns of development. Traditional ways of viewing and managing social and economic relationships can sometimes hinder the implementation of new approaches. Education for sustainable consumption is an opportunity for reorganizing information and how this information is understood in larger contexts. It provides a chance to reconsider such central questions as the meaning of life, the value of material and non-material prosperity, and the significance of service to one's fellow human. It also opens for reflection about the positive and negative aspects of accepted economic and social systems. It analyzes the scope and speed of technical and commercial innovations. In other words, ESC encourages the re-examination of the means which individuals, business and organizations use to achieve their goals.

4.2. Science and values

Science and values are two complementary systems that provide the tools for ESC. Education for sustainable consumption is not only about instrumental competences--it is also about the merging of scientific methods and information with social values. ESC encompasses gaining insight into social and economic development in one's own society and in others' and the processes and systems affecting such development. ESC requires competence in acquiring and analyzing available data about products and services, considering possible consequences and identifying alternative solutions. The scientific approach should be used by every enlightened consumer: thinking in terms of process, cause and effect, experiment and analysis, can help to guide consumption and lifestyle choices. Learning to think in terms of process can give people the means to understand the dynamics of natural and human systems.

As a means of ESC, scientific investigation can, for example, take the form of research projects, document studies, and the collection of statistics or testing of products.

4.3. Lectures, seminars, tutorials

Structured learning processes related to the ESC themes mentioned earlier in these guidelines can be carried out in traditional forum. Exploring the contents and the dynamics of a theme is, as in all educational situations, dependent on the target audience and the context.

4.4. Dialogue and discussion

ESC is a part of the shift of paradigm from staff oriented education to student-centred approaches. Traditional “frontal” lectures are not always considered to be the most advantageous method of teaching ESC. Dialogue between the teacher and the students as well as amongst the students themselves is vital. This means encouraging open discussion which allows the expression of conflicting opinions. Controversial issues are not always easy to handle but should not be avoided. There should be ample space for debate, disagreement and, when appropriate, challenging of prejudices, be they the students’ or the teacher’s.

4.5. Using the Internet

Across the globe, people of all ages are connecting, learning from each other and collaborating. New sources of information, updated reports, discussions and misinformation are all available on the internet. ESC involves learning how to use the internet constructively -- how to acquire and assess digital information as well as how to participate in the global processes of debate and action which the internet has fostered.

4.6. Use of media

Newspapers, radio, television, films, and other media offer significant source material and means of learning about sustainable consumption. Media and commercial advertisements dominate many environments and relay messages which learners need to be able to identify, to decode and to consider critically. Search the local and national newspapers, radio or television reports for real case histories. Other examples of use of the media are: participation in panel discussions and radio interviews, and the writing of articles for newspapers and internet blogs. Illustrations are a significant part of most media and using pictures in ESC adds an extra dimension to learning.

4.7. Active learning

ESC should not only assist the student in acquiring knowledge but mostly important also empower them to function responsibly in everyday life. A few important pedagogical principles related to active learning are:

- Problem orientation; coping with real problems
- Action orientation; dialectics between action and reflection
- Facilitation of student’s active participation, critical and creative thinking
- Facilitation of co-operation and dialogue with other agents
- Confrontation of the local and global perspectives
- Dialectical/dynamic thinking; focus on contradictions (as tensions), dilemmas, ambivalences and ways of coping with them.¹⁴

To begin with, teachers should try to involve the students in planning the learning process. This can be done by initiating reflection over issues related to sustainable consumption which the students find relevant to their lives. Mapping the students’ knowledge, experience and expectations creates a useful platform for organising the subsequent teaching and learning processes. Questionnaires, mind maps and interviews are helpful.

Although theoretical knowledge, scientific data and social values form the foundation for ESC, it is also important that the learning process uses exemplary material which is relevant to the students’ lives. The daily lives of the students contain many situations which can be used as frames of reference. Each type of activity should include, as much as possible, strategies that motivate the students to take personal and/or group action.

Giving space to encouragement and optimism in the learning process provides a significant incentive for the acquisition of action competences.

¹⁴ Jeppe Læssøe, Danish Pedagogical University

4.8. Projects

Project work is a method in which the students chose a specific issue or a current subject which they define and work with. They proceed from an idea to a finished product, a concrete result or a practical solution. Even though the product is important, the essential part of the project is the learning process that the student goes through. Projects give opportunities for experiences and knowledge to be processed and eventually presented to others. Planning, carrying out and evaluating are the student's main responsibility, but this is done in close cooperation with the teacher. In most cases, the project is defined as structured teamwork, but individual projects are possible and in certain situations recommended. Working with projects is a method which can be adjusted to the student's individual knowledge and stage of development.

4.9. Indicators of sustainable consumption

A variety of instruments have been created which measure development, economic growth and environmental impact. These instruments consist of indicators some of which are extremely useful in illustrating the need for sustainable consumption. Ecological footprints, the Human Development Index and others contain highly relevant information for ESC. There is also an ongoing effort to identify personal indicators for sustainable consumption which would reflect levels of quality of life. Using development indicators or developing one's own set of personal indicators can be a constructive method of teaching sustainable consumption.

4.10. Case studies (UNEP UNESCO YouthXchange)

Investigation of creative scenarios and alternative solutions which are available within or outside the students' neighbourhood brings experiences into the classroom. As with project learning, it is not enough to merely identify the cases. It is essential that they be examined and reflected over. YouthXchange is a training kit on responsible consumption published by UNESCO and UNEP (www.youthxchange.net).

YXC provides tools to include the multiple dimensions of SC into the educational curricula and to make a clear link between the way people live and act in society and the wider complex issue of sustainable development. To make sustainable consumption more immediate to youth, the YouthXchange tool kit refers to the notion of lifestyles rather than consumption: this way healthy eating, the sex trade or media literacy are included in the discourse as significant factors in developing consumer awareness. The website and the guide provide numerous stories and provide a collection of cases showing positive examples of sustainable consumption (see Resources page for details). These cases are backed by a large database on statistics related to lifestyles issues worlds wide and by a trainers room that helps teachers set up class room works using youthXchange and other resources.

4.11. LOLA (Looking For Likely Alternatives)

LOLA is a didactic tool for learning about sustainable lifestyles. Its goal is to help students to discover, approach and give visibility to new sustainable lifestyles in their surroundings. It goes beyond the common pedagogical use of case studies and project work which tend to be limited to the immediate classroom context. The process brings the students face-to-face contact with groups of people who question their current lifestyles and attempt to find constructive solutions. It connects the work of teachers and pupils at several schools through an ICT platform in a collective search for examples of universal value. (www.sustainable-everyday/lolaprocess)

4.12. Future workshops

Future workshops are learning workshops which enable the students to recognize important ESC issues by means of games, fantasy, visualising, drawing and discussing in order to gain greater self awareness of their own attitudes to these issues. Future workshops provide not only cognitive knowledge but the opportunity to deal with emotions and attitude modification. (<http://www.zw2003.de/EPages/willk.html>)

4.13. Drama and games

Role playing and other forms of dramatization (such as theatre, puppet shows, etc.) are very useful methodologies for ESC. Role playing can expose students to situations where there is a conflict of interest and they must play the roles of the stakeholders who are involved.

Digital games are available online and on CDs in several languages. Games which require that the students move around while participating often facilitate learning. Competitions, contests, and awards have been used successfully in some countries in connection with ESC. Collecting *oral histories* by asking the man on the street or one's own extended family about sustainable consumption issues brings students in close contact with others.

4.14. Celebrations

If ESC is to encourage more responsible lifestyles and decrease negative human impact on the environment, celebrations can be in order. Celebrations depend on the context and culture where they are held, and good suggestions can be found in past celebrations of such international days as "Earth Day", "International Consumers Day", etc.

4.15. Music, art and literature

Music and songs are an important part of the commercial world. They can also be a valuable part of the learning process as means of describing either dilemmas, information or suggested solutions. Students can also create their own songs to tell about sustainable consumption. The dilemmas connected to sustainable consumption are not new, only more serious and urgent. Art (drawing, painting, collage making, sculpturing, photography, etc) is a strongly recommended method for teaching about sustainable consumption. Classical literature, as well as modern literature, has dealt with the majority of ESC themes and reading and discussing relevant books, articles, short stories, poems, etc are important methods of learning about sustainable consumption. An interesting initiative of the Earth Charter International Secretariat and UNESCO is a musical CD - <http://www.pourlaterre.org/>

4.16. Field trips

On-site learning is an especially valuable way of developing awareness for sustainable consumption. For example: Visit a product testing laboratory, advertising firm, dumping ground, garbage heaps, renovation plants, recycling companies, water cleaning systems, ecological farms or transport businesses.

4.17. Networking

In some schools the opportunity exists to communicate with students in other parts of the world via internet. Sharing experiences related to a sustainable consumption theme can help make the topic more relevant and realistic for the students. Students should tell about their experiences and other students will refer how they would react in such situation. Then they should summarize all positives and negatives. They can analyse various situations from long-term and short-term impact to their life, environment, society, and the world.

4.18. Showcasing

Showcasing is exhibiting what has been done so far within sustainable consumption themes, giving positive models, success stories, best practices etc. It is a tool for sharing the ESC learning process with others. It also helps students' describe their findings and thereby often gaining better insights as they do so.

4.19. Invert analysis

This method involves requesting students to consider the opposite of what is the usual approach. For example: to consider the cost to society (i.e. expenses which are being paid by every person for the negative consequences) of uninformed and unaware consumer behaviour. Another variant of this approach is that of changing perspective. In this case students are asked to identify a standpoint in an issue and then encouraged to develop an argument from a standpoint other than their own.

4.20. Mind maps

Mind maps are known by many names: association maps, brainstorming and connection survey. Some teachers use mind maps both at the beginning of a teaching session and in the end in order to chart what the students know and what they have learned. Instead of thinking in a linear manner, from one main point and on to several more detailed elements, mind maps allow the students to present ideas connected with the main theme, without having to sort the elements into hierarchical order. Following the first stage of noting all ideas, it is important to work with the students to organize the contents of the mind maps.

Mind maps can also be used to map alternative solutions to problems. Consumer-related problems do not have only one correct answer. The students should have the opportunity to find different solutions, consider pros and cons, state the reasons both orally and in writing, and try out the solutions as much as possible.

4.21. Strategic questioning

Strategic questioning is a form of thinking about change. Change is often accompanied by a range of uncomfortable emotions, including denial, fear and resistance. However, change also provides opportunities for new ideas to emerge. Strategic questioning assists the integration of new ideas and strategies into the development of individuals and communities in such a way that people can feel comfortable.

4.22. Humour

Humour, as expressed in jokes and sarcasm, often reflects social norms, pressures and criticism. Humour often deals with issues which are awkward to address directly or which have become so deeply ingrained in the culture that they are assumed to be “natural” or “inherent”. An enjoyable and interesting exercise is to have students collect jokes and humorous remarks on topics related to sustainable consumption. Once the collections have been made and the contexts documented, it is valuable to have a discussion about the reasons for and the implications of the remarks.

DRAFT

5. ESC assessment

The teacher is normally responsible for choosing the ESC evaluation criteria and methods. The evaluation itself can be carried out in collaboration with the students using self-evaluation, peer evaluation and other evaluation methods. In some schools written individual exams are the traditional form of evaluation. This form of assessment functions for ESC in only some cases. Individual written examinations do not necessarily give feedback about the extent to which the student is actually able to function in society. Nor do they reflect the student's ability to apply the knowledge the student has gained. If the final goal of ESC is to develop critical, aware, consumer citizens, alternatives to the usual exam might be more useful. Here are some suggestions:

Portfolio assessment is means of evaluating the student's progress by selecting examples of their work throughout the learning process which indicate progress and content.

Group examinations Group examinations are a positive tool for assessment. Because many ESC issues are controversial, a group examination demands that students move from opinion to a meta cognitive level of understanding.

Showcasing Producing a (school) newspaper, making an exhibition or creating "professional" presentations: boards, video, tapes are ways of making concrete summaries which can be used for evaluation of the learning process.

Using the internet: one form of assessment can be to test the student's ability to carry out research via the internet and to use it as a communication platform for consumer citizenship.

Research and direct trials analysis of products, production and services can also be used as the basis for assessment.

Self evaluation: This is the students' own evaluation: during the course, at the end of the course and after some time (maybe one month after the end of the course) which examines if the learning process had any impact on the way of life of the student.

Pass/fail status: In many cases the assessment can be trickier than in "traditional subjects" – there are not so many final truths and everyone has a right to own opinion. One can assess participation, open-mindedness, and understanding of the main problem areas. Classes can be on a pass/fail course, not graded at different levels.

Inclusion of questions/tasks about ESC topics in existing exams in other subjects: In the event that ESC occurs as a cross cutting interdisciplinary theme, then inclusion of questions in the exams of the individual subjects is a means of securing assessment of the learning process.

Evaluation of the learning process of ESC is only part of the evaluation needed when integrating ESC into educational systems. The process of integration itself needs to be assessed. To assist in this process several tools exist such as the ESC matrix form (see section III Relevant Resources) and the UNECE Indicators for ESD.

About UNEP

UNEP is the voice for the environment within the United Nations system.



UNEP's mission is to provide leadership and encourage partnership in caring for the environment by inspiring, informing, and enabling nations and peoples to improve their quality of life without compromising that of future generations.

UNEP is an advocate, educator, catalyst and facilitator, promoting the wise use of the planet's natural assets for sustainable development.

UNEP works with many partners: United Nations entities, international organizations, national governments, non-governmental organizations, business, industry, the media and civil society.

What UNEP does:

- Assessing global, regional and national environmental conditions and trends
- Developing international agreements and national environment instruments
- Strengthening institutions for the wise management of the environment
- Integrating economic development and environmental protection
- Facilitating the transfer of knowledge and technology for sustainable development
- Encouraging new partnerships and mind-sets within civil society and the private sector

About UNEP DTIE

The UNEP Division of Technology, Industry and Economics (DTIE) helps governments, local authorities and decision-makers in business and industry to develop and implement policies and practices focusing on sustainable development.

The Division works to promote:

- Sustainable consumption and production,
- The efficient use of renewable energy,
- Adequate management of chemicals,
- The integration of environmental costs in development policies.

UNEP DTIE activities focus on raising awareness, improving the transfer of knowledge and information, fostering technological cooperation and partnerships, and implementing international conventions and agreements.

About the Marrakech Process on Sustainable Consumption and Production

The Marrakech Process is a global multi-stakeholder process to promote sustainable consumption and production (SCP) and to elaborate a 10-Year Framework of Programmes, which is meant to be of SCP.



UNEP and UNDESA are the leading agencies of this global process, with an active participation of national governments, development agencies, private sector, civil society and other stakeholders.

The Marrakech Process has developed various mechanisms for consultation and implementation of projects, initiatives and strategies on SCP, which include international and regional expert meetings, seven task forces focusing on specific issues of SCP, development cooperation dialogue, Business and Industry Forum as well as NGO Forum.

About the Marrakech Task Force on Education for Sustainable Consumption

The Marrakech Task Force on Education for Sustainable Consumption, led by the Italian

Ministry for the Environment, Land and Sea, was launched in 2006 during the 14th Session of the United Nations Commission on Sustainable Development (CSD14 - New York, May 2006). The Task Force focuses on introducing sustainable consumption and production issues into formal curricula through the identification of formal education tools and strategies, the identification of competences and skills at all levels (education, training process, decision making), and by encouraging measures to ensure the effectiveness of national/regional policies. The Task Force's approach to Education for Sustainable Consumption is also developed with regards to life-long learning processes, and fully considers the role of corporate, social and environmental responsibility.



Italian Ministry
for the
Environment,
Land and Sea

