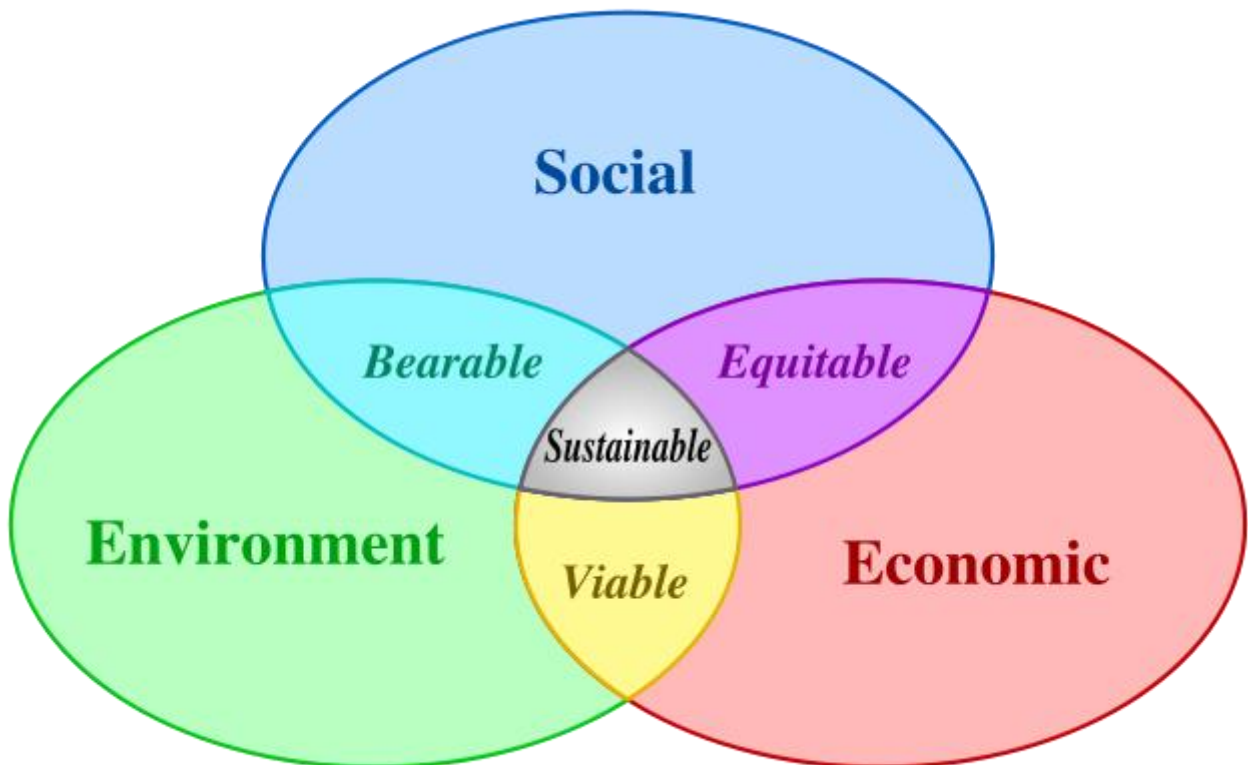


BACKGROUND AND ISSUES PAPER

OECD WORKSHOP ON EDUCATION FOR SUSTAINABLE DEVELOPMENT

11-12 September 2008
OECD Conference Centre, Room 6
2 rue Andre-Pascal, 75016 Paris
Paris, France

Purpose: *This workshop will review the current status of analysis and recommendations related to the UN Decade of Education for Sustainable Development (2005-2014) (DESD) and where useful contributions can be made by the OECD and OECD countries. The workshop findings will contribute to the UNESCO World Conference on Education for Sustainable Development to be held in Bonn, Germany on 31 March-2 April 2009.*



SESSION 1: DEVELOPING STRATEGIES FOR EDUCATION FOR SUSTAINABLE DEVELOPMENT

The United Nations Decade of Education for Sustainable Development (DESD) (2005-2014) is aimed at providing people with the skills, values, and knowledge to create a sustainable present and future, including economic, environmental and social dimensions. The United Nations Educational, Scientific and Cultural Organisation (UNESCO) developed an International Implementation Scheme for DESD with five objectives: enhancing the role of education in the pursuit of sustainable development; facilitating networking among relevant stakeholders; promoting all forms of learning and public awareness to further sustainable development; fostering increased quality of teaching about sustainable development; and developing strategies at every level to strengthen capacity in education for sustainable development.

Among the key educational themes of the DESD are environmental protection, natural resource management, biological and landscape diversity, rural and urban development, production and consumption patterns, corporate responsibility, poverty alleviation, citizenship, peace, ethics, democracy and governance, justice, human rights, health, gender equity, and cultural diversity. The goal is to integrate the concepts and values inherent in sustainable development in all aspects of learning.

A European regional strategy (the *Vilnius Strategy*) for Education for Sustainable Development was developed by the United Nations Economic Commission for Europe (UNECE) in 2005. UNECE countries are encouraged to incorporate key sustainable development themes in formal, informal and non-formal educational systems. The European Union (EU) Sustainable Development Strategy mandates EU Member states to implement the Vilnius Strategy, further develop their national ESD strategies, and ensure adequate teacher training on sustainability issues. Other regions, including the Asia-Pacific area, are also developing and implementing regional strategies for ESD.

A number of OECD countries have implemented national strategies for Education for Sustainable Development (**Table 1**) or are in the process of developing such plans. These strategies tend to be developed by Education Ministries in consultation with Environment Ministries. Most strategies advocate that environmental concepts be included in the teaching of a range of subjects and are linked to practical learning experiences in a “whole-school” approach. They may also outline general competencies that students should acquire, including logical and critical thinking and communication and citizenship skills.

In general, global progress in developing and implementing national strategies for Education for Sustainable Development has been slow. UNESCO is attempting to monitor country progress through a set of indicators which track institutional arrangements for DESD, including the incorporation of ESD in national policy documents, relevant legislation or regulatory papers; the establishment of public budgets or economic incentives to support ESD; and the existence of national coordinating bodies for ESD implementation and formal structures for interdepartmental co-operation for ESD.

Many of the challenges in implementing ESD strategies mirror country experiences in developing National Sustainable Development Strategies (NSDS). Barriers include a lack of top-level political commitment and difficulties in coordinating across a range of government departments and ministries. Too often, Education Ministries are unable to gain support from other departments and have difficulties extending ESD strategies beyond environmental concerns. Programmatic and budget support for ESD, consultation processes for stakeholders, and local and regional involvement are often lacking. For greater effectiveness, ESD strategies could build on the processes developed for National Sustainable Development Strategies, which are now in place in most countries. Sector strategies (*e.g.* for education, tourism, transport) could be enumerated within the context of National Sustainable Development Strategies to enhance synergies and facilitate implementation.

Questions for discussion:

1. What are the main obstacles to developing national strategies for Education for Sustainable Development?
2. How can Education for Sustainable Development be better linked to National Sustainable Development Strategies (NSDS)? Should sectoral strategies for education and other areas be developed within NSDS?
3. What can the OECD do to assist countries in developing national strategies for Education for Sustainable Development?

Table 1. OECD National Strategies for Education for Sustainable Development

Country	Strategy statement	Website
Australia	<i>Caring for Our Future:</i> Australian Government Strategy for the Decade on Education for Sustainable Development (2007)	www.environment.gov.au/education/publications/pubs/caring.pdf
Finland	Strategy for Education and Training for Sustainable Development: 2006-2014	www.edu.fi/julkaisut/engnetKekekajako.pdf
Germany	German Plan of Action for the UN Decade of Education for Sustainable Development (2005)	www.bne-portal.de/coremedia/generator/unesco/de/Downloads/Dekade_Publikationen_international/National_20Action_20Plan.pdf
Japan	Action Plan for the UN Decade of Education for Sustainable Development (2006)	www.unescobkk.org/fileadmin/user_upload/esd/documents/desd/Japan_Action_Plan_for_DESD.pdf
Korea	National Strategy for the UN Decade of Education for Sustainable Development (2006)	www.pcsd.go.kr/eng/eng_about01.html
Netherlands	<i>Learning for Sustainable Development: From Margin to the Mainstream:</i> Dutch National Program (2004-2007)	www.noord-holland.nl/Images/65_96162.pdf
Norway	Action Plan for Education for Sustainable Development (2006-2010)	www.utdanningsdirektoratet.no/templates/udir/TM_Artikkel.aspx?id=2436
United Kingdom	<i>Brighter Futures--Greener Lives:</i> Sustainable Development Action Plan (2008)	www.dfes.gov.uk/aboutus/sd/docs/SustainableDevActionPlan_2008.pdf

SESSION 2: DEVISING CURRICULA FOR EDUCATION FOR SUSTAINABLE DEVELOPMENT

The UNESCO Decade is oriented to promoting education *for* sustainable development, including broad changes in teaching and learning approaches to ensure sustainable lifestyles. Part of this is educating *about* sustainable development to develop subject and methodological competencies. However, there is little agreement on the subject content of sustainable development, at what school levels it should be taught, and how it should be included in core curricula. Existing curricula for Education for Sustainable Development tend to focus on the environment while referring to broad sustainable development concepts and skills (*e.g.* critical thinking, citizenship) rather than to specific subject matter.

Curricula guidance is needed which goes beyond environmental education to teach students the more complex concepts and thinking related to sustainable development. A proposed approach is presented in **Table 2**. Here, teaching progresses from giving students a solid understanding of basic economic, environmental and social concepts (primary level), to explaining interdisciplinary concepts and the need for integrated approaches (secondary level), to studying the state-of-the-art in sustainable development governance, measurement, assessments and practices (tertiary level). This approach could be adapted by countries to suit their own educational systems and culture, as generally based on the following elements:

- 1. Courses** – Sustainable development should be part of core curricula at all school levels, which will differ in the degree of course integration. At primary level, the basic concepts associated with each pillar should be taught broadly as part of existing lessons or courses. At secondary level, connections between two (or more) pillars should be taught in relevant courses such as social studies, geography and science. At tertiary level, the integration of the three pillars of sustainable development should be presented in a more overarching way through stand-alone sustainable development units or courses.
- 2. Concepts** -- Curricula should progress in complexity in terms of integrating the three sustainable development pillars. In primary school, a foundation in economic, environmental and social concepts should be established. At secondary level, integrative concepts and methods should be featured, including economic-environment, economic-social, and social-environment interactions. University or tertiary programmes should stress: 1) the integrated assessment of the economic, environmental and social aspects of issues; 2) the longer-term intergenerational and future dimensions; and 3) the need for open and transparent governance processes to involve stakeholders.
- 3. Systems** – Sustainable development concepts can be illustrated by placing them in the context of relevant systems. At primary level, economic markets (supply and demand), ecosystems (environmental diversity), and social systems (society and its actors) should be explained. The integration of these systems could be taught at secondary level through examples such as carbon trading (economic/environment), human capital (economic/social), and transport (social/environment). Systems for the full integration of the three pillars include strategies for national sustainable development (NSDS), consumption and production (SCP), and sectors such as education (ESD).
- 4. Measurement** – Quantitative and qualitative approaches to measuring the three pillars and their integration should be taught together with basic concepts and systems. At primary level, these could relate to wealth (GDP per capita), ecological and carbon footprints, and participatory processes such as voting. At secondary level, examples of measuring interactions include calculating the costs of inaction on climate change (economic/environment); assessing income distribution (economic/social); and measuring happiness and well-being (social/environment). At tertiary level, comprehensive approaches for measuring sustainable development consist of sets of economic, environmental and social indicators; sustainability indices which combine these measures; and sustainability impact assessments based on these measures.

5. **Practices** – Developing subject competencies should be accompanied by practical experiences to develop social and personal competencies. Starting from the earliest years (pre-primary), participatory learning strategies can produce the attitudinal and behavioural changes and values (tolerance, solidarity) needed for sustainable development. There exist a wealth of Internet tools and other materials for applying learning in a variety of real life contexts. At primary level, these include the many environmental activities of eco-schools. In secondary school, starting green businesses and promoting *Fairtrade* products can increase understanding of positive entrepreneurship and social justice. In university, the full economic, environmental and social dimensions of sustainable consumption and production and corporate responsibility should be explored and applied.

Questions for discussion:

1. *What approaches to teaching subject competencies would help move beyond environmental education to Education for Sustainable Development?*
2. *When should Education for Sustainable Development begin? How can sustainable development concepts and abilities be integrated into selected courses or taught as stand-alone units?*
3. *How can the OECD assist in developing curricula guidance for Education for Sustainable Development?*

Table 2: Curricula Guide for Education for Sustainable Development

	Courses	Concepts	Systems	Measurement	Practices
Primary School	Single pillars taught broadly in general lessons	a) economic b) environment c) social	a) markets b) ecosystems c) society	a) wealth b) eco-footprints c) voters	a) fundraising b) eco-schools c) citizenship
Secondary School	Integration of two (or more) pillars taught in existing courses (e.g. social studies)	a) economic/ environment b) economic/ social c) social/ environment	a) carbon trading b) human capital c) transport	a) costs of climate inaction b) income distribution c) measures of well-being	a) green entrepreneurs b) poverty reduction c) <i>Fairtrade</i>
Tertiary Level	Integration of three pillars taught in stand-alone units (sustainable development studies)	a) economic/ environment and social b) inter-generational concerns c) participatory processes	a) sustainable development strategies (NSDS) b) sustainable consumption and production strategies (SCP) c) education for sustainable development strategies (ESD)	a) capital-based indicators b) sustainability indices c) sustainability impact assessments	a) sustainable production b) sustainable consumption c) corporate responsibility

SESSION 3: PROMOTING SUSTAINABLE SCHOOLS

Most Education for Sustainable Development strategies advocate a “whole-school” approach, where students, educators and administrators are engaged in working towards a sustainable school in terms of infrastructure and buildings, transport and meals, management, teaching approaches, student activities, and community involvement. The emphasis is on practical applications and participatory learning focused mainly on environmental dimensions.

The OECD Programme for Educational Building (PEB), in its project on “Sustainable Development and Education Facilities,” is compiling information on how to plan, design and manage schools and institutions in a sustainable way. The short and long-term costs and benefits (in economic, environmental and social terms) of investing in “green” school buildings (*e.g.* low-energy, nontoxic) and socially-responsible procurement practices will be assessed.

OECD countries have diverse approaches for enhancing the environmental sustainability of schools, including the *Green School Awards* in Sweden, the *Enviroschools* programme in New Zealand, and the *Sustainable Campus* programmes in Mexico and Spain. The United Kingdom has adopted *Sustainable School* strategies which take a systems-based approach to environmental education. This is structured around eight access points or doorways which link sustainable practices to teaching: food and drink, energy and water, travel and traffic, purchasing and waste, building and grounds, inclusion and participation, local well-being, and global dimensions.

The international *Eco-Schools Program* promotes environmental learning and practices in thousands of schools worldwide. In addition to enhanced environmental awareness, community involvement and citizenship are also key elements. These schools actively use their buildings and grounds as learning resources, such as investigating energy and water use and participating in the planning of new buildings with sustainable design features. Activities include improving the school campus with art work, tree planting, recycling, and growing food in school gardens. Schools are encouraged to bring the local community into the process and to inform the public about their activities.

The *Environment and Schools Initiative* (ENSI) is an international government-based research network established in 1986 under the auspices of the OECD Centre for Education, Research and Innovation (CERI). ENSI’s *Quality Criteria for ESD-Schools* proposes a list of factors for environmentally-sustainable institutions such as *Learnsapes*, which aims to redesign school grounds to permit students, teachers and communities to interact with the environment.

The UN Interagency Committee for DESD, chaired by UNICEF, brings together diverse UN agencies in developing an *Environmental Education Resource Pack for Child Friendly Schools and Learning Spaces*. This recommends facilities-based environmental practices including renewable energy, school gardens, tree planting, and rainwater harvesting, which are aligned with four distinct climate zones (highland/mountains; flood plains/small islands; rainforests; and drylands/deserts).

Questions for discussion:

1. *How can countries and localities share best practices in building and managing environmentally and socially sustainable schools?*
2. *How can sustainable school practices be better linked to teaching sustainable development concepts and competencies?*
3. *How can the OECD assist in promoting sustainable schools?*

SESSION 4. EDUCATING FOR SUSTAINABLE CONSUMPTION

An important component of Education for Sustainable Development is informing individuals on how to consume sustainably. Meeting the needs of tomorrow's consumers will depend on a shift towards more sustainable consumption patterns today. Sustainable consumption can be taught through consumer education programmes and initiatives as well as through formal and informal schooling on education for sustainable development.

Consumer education programmes can help individuals who want to behave sustainably but find it hard to translate this into action. Many OECD countries are putting sustainability into consumer education under the *aegis* of their consumer policy agencies, more generally concerned with consumer rights and protection. Consumers are increasingly concerned about obtaining credible information on the environmental, ethical and social aspects of products and services and the businesses that provide them. Confusion results from the large number of labels and claims about sustainable products and a lack of knowledge about the costs and benefits of offsetting effects (*e.g.* locally produced food products *vs.* the carbon miles of imported *Fairtrade* goods). Consumers need not only more information about the sustainability implications of their purchasing choices but also education on how to select goods and services wisely.

The Marrakech Task Force on Education for Sustainable Consumption, led by Italy, is producing lessons and practical exercises for sustainable consumption at all levels of education. *Here and Now: Education for Sustainable Consumption* is a set of guidelines for its introduction into formal learning processes and includes curriculum suggestions and a listing of resources and teaching materials. One resource is the identification of best practices in education for sustainable consumption. Eco-schools, for example, practice sustainable consumption through recycling, waste management, and energy and materials consumption. Students are engaged in conducting audits of school and household energy consumption and measuring their ecological and carbon footprints. In some cases, sustainable consumption lessons go beyond the environment to address social issues such as preventing obesity, fighting global poverty, and promoting worker rights through purchasing choices.

The United Nations Environment Program (UNEP), which supports the Marrakech Process, featured educational approaches in its *Guidelines for National Programmes on Sustainable Consumption and Production*. UNEP has developed a number of educational tools for sustainable consumption, including *YouthXchange*, a training kit on responsible consumption developed with UNESCO. The toolkit and website are based on the notion of sustainable and unsustainable lifestyles and related impacts rather than on consumption *per se*.

Lifelong learning for sustainable consumption is a main focus of *Consumers International*, which aims to reduce the gap between formal learning processes and concrete consumption experiences in society. The group seeks to make visible the consequences of individual purchasing choices for global economic, environmental and social concerns. This depends on increasing research on the sustainability of consumption choices and linking this to formal and informal education.

Questions for discussion:

1. How can sustainable consumption be integrated into learning and practical exercises linked to Education for Sustainable Development?
2. How can sustainable consumption be taught through general consumer education programmes?
3. What can the OECD do to further develop and implement education for sustainable consumption?