



SUSTAINABLE DEVELOPMENT

and vocational education and training



FINNISH NATIONAL
BOARD OF EDUCATION

Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs. Its three basic elements include ecological, economic and socio-cultural sustainability. The objectives of sustainable development aim for people to learn to live in harmony with nature and each other.

Adapted from the UN World Commission on Environment and Development 1987

Strategies showing the way forward for promotion of sustainable development

The Ministry of Education's strategy document 'Sustainable Development in Education' (2006) sets out the following development measures to promote sustainable development in VET by 2014:

Follow-up how well sustainable development permeates through vocational skills demonstrations into the world of work by 2014. Continue to diversify the production of teaching material and provide further training in sustainable development for teachers and workplace instructors operating in different occupational fields.

The environmental certificate system of educational establishments shall be developed further. By 2014, their environmental certificate should encompass the social and cultural aspects of sustainable development.

Ideally, 15% of educational establishments will have acquired some certificate or diploma in recognition for their efforts for sustainable development by 2014. This means that teachers working in vocational education have to be provided with sufficient supplementary education.

Investments made into nature and environmental teaching units should also benefit the wider public; therefore, these units should become resource centres for environmental and sustainable development know-how by 2014.

The aim is to incorporate sustainable development into the planning and implementation of different Skills events by 2014.

It is essential to increase competence related to sustainable development and environmental issues in order for Finland and the entire global community to survive challenges involved in aspects such as prevention of climate change, increasing consumption of natural resources, reduction in biodiversity and development issues. Schools and other educational establishments play a key role in creating these abilities. One of the objectives of education is to raise responsible and contributing citizens, who are able to take the perspectives of sustainable development into account in their work and everyday choices.

A responsible citizen is aware of the ecological, economic, social and cultural dimensions of sustainable development, aiming to reconcile them in everyday decisions. It is essential to be aware of change needs at both individual and community levels, be able and motivated to contribute and participate, and be committed to a sustainable lifestyle.

VET carries on what was learnt during basic education

Compulsory basic education includes a cross-curricular theme entitled 'Responsibility for the Environment, Well-Being and a Sustainable Future', which is implemented in various subjects, from the perspectives characteristic of those subjects and in a manner required by the pupil's developmental phase, and which must be visible in the school's operational culture and everyday practices. It is the objective of basic education to raise environmentally conscious citizens who are committed to a sustainable way of life and able to build the future upon ecologically, economically, socially and culturally sustainable premises.

The objective of basic education is for pupils to:

- *come to understand the prerequisites of human well-being, the necessity of environmental protection, and the relationship between the two*
- *learn to observe changes taking place in the environment and human well-being, to clarify these changes' causes and consequences, and to act for the good of the living environment and the enhancement of well-being*
- *learn to evaluate the impacts of their consumption and daily practices and to adopt the courses of action required for sustainable development*
- *come to understand their own cultural heritage, different cultures, prerequisites for trust among human groups and justice*
- *learn to promote well-being in their own communities and to understand the threats to, and potential for, well-being at a global level*
- *come to understand that, through their choices, individuals construct both their own futures and our common future and learn to act constructively for a sustainable future.*



Promotion of sustainable development in VET

The National Core Curricula for upper secondary vocational qualifications are being revised during 2007–2010. The common section included in all National Core Curricula determines the principles and procedures common to all upper secondary vocational qualifications, complete with the key values of education providers. The common section also imposes obligations on education providers to take the following actions, among other things, which involve various aspects of sustainable development:

- Education providers must take action to organise activities related to instruction to reinforce communality, which provide the opportunity to consider values and become acquainted with the cultural heritage (Vocational Education and Training Decree 811/1998, section 9).
- Education providers must draw up a staff development plan.
- Education providers must prepare plans of action to promote equality and equity in education and training as part of their curricula.
- Education providers must carry out measures to promote sustainable development.

The Quality Management Recommendations support promotion of sustainable development

The Quality Management Recommendations for Vocational Education and Training were adopted in January 2008. The purpose of the Quality Management Recommendations is to provide a framework for long-term development of quality management in all types of vocational education and training. The Quality Management Recommendations for Vocational Education and Training are based on the Common Quality Assurance Framework (CQAF), developed as part of the European Union's Copenhagen process in vocational education and training.

Sustainable development is visible in different stages of quality management as follows:

- Planning: VET providers include a programme for sustainable development as part of their operational system, in order to steer achievement of objectives and measures relating to environmental issues, social responsibility and occupational health and safety and the well-being of staff and students.
- Implementation: VET providers make sure that the principle of sustainable development is implemented as part of all operations.
- Implementation: VET providers take action to promote socially, ecologically, economically and culturally sustainable development.

SUSTAINABLE DEVELOPMENT IN THE NATIONAL CORE CURRICULA FOR UPPER SECONDARY VOCATIONAL QUALIFICATIONS:

Sustainable development is one of the key skills for lifelong learning within the National Core Curricula for upper secondary vocational qualifications:

'Students or candidates shall commit to acting for the ecological, economic, social and cultural principles of sustainable development in their occupation. They shall comply with key statutes, regulations and agreements governing sustainable development when carrying out work assignments within their field.'

Sustainable development is also included in vocational qualification modules within the National Core Curricula according to field-specific emphases. Sustainable development is assessed as part of vocational skills demonstrations and/or other competence.

The Vocational Qualification in Natural and Environmental Protection within the field of Natural Resources and the Environment offers a 30-credit module for sustainable development named Acting in a Sustainable Manner.

Sustainable development is included in the following qualification modules to supplement vocational skills (core subjects):
Compulsory studies in qualification modules to supplement vocational skills:

- Physics and Chemistry, 2 credits
- Health Education, 1 credit
- Arts and Culture, 1 credit

Optional studies included in compulsory qualification modules to supplement vocational skills:

- Environmental Studies, 0–4 credits
- Ethics, 0–4 credits
- Entrepreneurship, 0–4 credits

Optional studies included in compulsory qualification modules to supplement vocational skills cover Environmental Studies, 0–4 credits.

The objective is for students to:

- observe working and operating methods in line with the principles of sustainable development in such a way that these support achievement of vocational skills and supplement vocational skills;
- function so as to conserve energy;
- prevent generation of waste and sort waste appropriately and also command the life cycles of products relevant to their vocational skills;
- work so as to minimise environmental risks and act so as to foster their cultural heritage.

Incorporating sustainable development as part of everyday school life

An educational establishment that promotes learning a sustainable lifestyle is a place where sustainable development is incorporated into all activities. Development of the school community is based on value discussions open to all members of the community. A sustainable development programme enables the educational establishment to incorporate the perspective of sustainable development into management, instruction and operational culture.

In order to put together such a programme, many establishments set up a broad-based working group involving representatives from different staff groups and students. The management's commitment and allocation of the necessary resources are essential for this work to succeed. It is also important to co-operate with external parties to develop instruction and everyday practices.

The first step of the process is a review, which charts the current situation of sustainable development within the educational establishment. It may examine various aspects of environmental management, such as use of materials, effectiveness of waste sorting procedures or energy conservation. Social and cultural sustainability can be explored through surveys relating to student and staff well-being or assessments of safety and security risks, multiculturalism and cultural heritage, for example. It is also important to examine the way in which sustainable development issues have been included in instruction, on-the-job learning and vocational skills demonstrations.

The results of the review are discussed jointly among staff and students and the most important areas for improvement are raised as objectives of the sustainable development programme. The programme will also set out measures, responsibilities, schedules, resources as well as monitoring, evaluation and assessment. Instructions, communication, training and co-operation are also necessary to support implementation of the programme. These are used to commit the entire school community to common goals and to ensure that all staff groups have sufficient competencies. In addition to the school's own staff and students, sustainable development matters are also communicated to stakeholders.

Various systems and tools have been developed to support the sustainable development work of educational establishments. These include the Eco-Schools Programme and the Environmental Certification for Schools and Educational Establishments.

Tools to put together a sustainable development programme are available at www.edu.fi (in Finnish).

ENVIRONMENTAL ISSUES WITHIN THE EFQM MODEL



Figure: Leena Koski, FNBE

The Eco-Schools Programme

The Eco-Schools Programme is an international programme for environmental education, co-ordinated in Finland by the Finnish Association for Environmental Education (SYKSE). The Eco-Schools Programme is an operating model which provides participants with a concrete way of reducing the environmental effects of their operations, link sustainable development issues as part of their everyday instruction and operations, and mobilise students and staff. Programme participants receive support materials and regular feedback on their actions. Participants include day-care centres, comprehensive schools, upper secondary schools, vocational institutions and other organisations operating in the field of education.

The Eco-School Programme is organised to progress one theme at a time. Basic themes include water, energy and waste reduction. Later on, participants may choose the local environment, sustainable consumption or our common world theme, or a theme they have developed themselves. Each theme is always dealt with for a period of one year, at the end of which the educational establishment may apply to the national Green Flag Committee for the Eco-Schools Green Flag. The idea is for the project to continue with a new theme in the next school year.

Further information about the Eco-Schools programme is available at www.eco-schools.org (www.vihrealippu.fi in Finnish).

Environmental criteria expand to cover sustainable development

Environmental Certification of Schools and Educational Establishments provides efficient tools to support self-assessment, preparation of a sustainable development programme and development of instruction and learning environments. During 2008, the certification criteria will expand to cover criteria for sustainable development, which will also include the perspectives of economic, social and cultural sustainability in addition to environmental aspects. The criteria examine incorporation of sustainable development into school management, instruction and operational culture.

The assessment criteria for vocational institutions are based on sustainable development skills needs in various educational fields, which have different emphases depending on the field. The criteria focus on linking sustainable development as part of instruction, on-the-job learning and vocational skills demonstrations. What is important here is that the perspectives of the different aspects of sustainable development have been taken into account in the practices in place in the institution's vocational learning environments, such as workshops, the teaching kitchen or the teaching farm. In terms of their operational culture, institutions may

choose various themes as priorities of their sustainable development work, including use of materials, water and energy, waste management, safety and security, well-being, prevention of exclusion, multiculturalism or cultural environment.

The new criteria for sustainable development and the lists of self-assessment questions drawn up on the basis of these criteria will be prepared so as to ensure easy integration with various quality management tools, such as the EFQM Quality Award criteria.

Next step – from Environmental Certification of Schools and Educational Establishments to Sustainable Development Certification

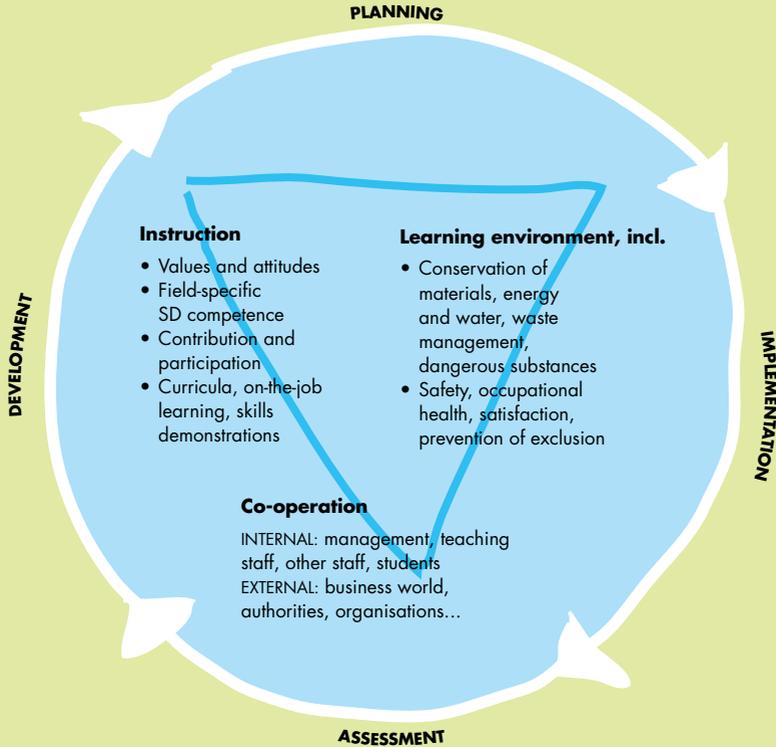
Educational establishments may apply for an environmental certificate from the OKKA Foundation for Teaching, Education and Personal Development. Certificates are awarded on the basis of the Environmental Criteria for Schools and Educational Establishments. Certification requires an educational establishment to carry out self-assessment. In addition, an external auditor will verify that the educational establishment fulfils the environmental criteria. Certification according to the new sustainable development criteria will start at the beginning of 2009.

The OKKA Foundation, SYKLI Environmental School of Finland and Eco-One provide materials, advice and training to support use of the environmental criteria, preparation of a sustainable development programme, self-assessment and application for a certificate. Further information is available at www.koulujaymparisto.fi (in Finnish), www.sykli.fi, www.kolumbus.fi/eco-one.

The Finnish National Board of Education also encourages vocational institutions to take up the criteria and certification system through financial incentives. Institutions may apply for grants for external audits from the National Board of Education. Free-form applications with justifications should be addressed to Ms. Susanna Tauriainen and sent to the Finnish National Board of Education Registry Office (contact details below).

The environmental criteria and certification system for educational establishments was developed as part of the Envedu project, co-funded by the European Community's LIFE Programme and the Finnish Ministry of the Environment. Project partners included the Trade Union of Education in Finland (OAJ), the OKKA Foundation, the Finnish National Board of Education, the Hyvinkää-Riihimäki Vocational Adult Education Centre, the University of Oulu, the University of Joensuu Department of Applied Education and Eco-One.

SUSTAINABLE DEVELOPMENT IN SCHOOL OPERATIONS



STEPS INVOLVED IN SD WORK

1. Initial review
2. Sustainable development programme: objectives and measures
3. Self-assessment
4. External audit
5. Environmental Certification, Eco-Schools Green Flag

TOOLS TO SUPPORT SD WORK

Environmental Certification of Schools and Educational Establishments

Criteria, support materials and training for preparation of environmental programmes and self-assessment

Eco-School Programme

Criteria, support material and training: environmental education, participation, ecological everyday practices

SD in VET project

SD objectives and contents in instruction in different fields of VET

National Core Curricula

Contact information:

VET and sustainable development
Ms. Susanna Tauriainen
Finnish National Board of Education,
P.O. Box 380, FI-00531 Helsinki, Finland
Tel.: +358 (0)40 348 7811
susanna.tauriainen@oph.fi

Environmental Certification of
Educational Establishments
Mr. Erkka Laininen
OKKA Foundation, Rautatieläisenkatu 6 A,
FI-00520 Helsinki, Finland
Tel.: +358 (0)50 372 9195
erkka.laininen@okka-saatio.com

Eco-Schools Programme
Ms. Aino Alasentie
Pohjoinen Hesperiankatu 15 A,
FI-00260 Helsinki, Finland
Tel.: +358 (0)9 4541 8150
Fax: +358 (0)9 2600 122
vihrealippu@ymparistokasvatus.fi

Finnish National Board of Education
PO. Box 380 (Hakaniemenranta 6)
FI-00531 Helsinki, Finland
Telephone +358 40 348 7555
opetushallitus@oph.fi
www.oph.fi