



Strategy for Education and Training for Sustainable Development and Implementation Plan 2006–2014

Finnish National Commission on Sustainable Development,
Sub-committee for Education



SIJOMEN KESTÄVÄN
KEHITYKSEN TOIMIKUNTA

FINLANDS KOMMISSION
FÖR HÅLLBAR UTVECKLING

FINNISH NATIONAL COMMISSION
ON SUSTAINABLE DEVELOPMENT

Summary

If we are to build our future on a sustainable ground, we need to learn to maintain social, cultural, and economic well-being without depleting natural resources or overloading nature's delicate balance. It is the task of education and training to ensure that citizens of all ages have the knowledge, skills, readiness and vision that will enable them to build a sustainable and equitable future and commit to a sustainable way of life. The goals and core contents for sustainable development education and training have been outlined in the national core curricula.

The Ministry of the Environment appointed a Sub-committee for Education to The Finnish National Commission on Sustainable Development in May 2004. The sub-committee first began its work by charting out the roles various people have in the education and training of sustainable development before launching the preparation of the strategy. Both international and national processes have been taken into consideration in drawing up the strategy. The strategy is targeted at all those with decision making power in education and training covering all levels of decision-making and all fields of administration.

The Sustainable Development Strategy and Implementation Plan for Education and Training 2006–2014 is a joint plan of various participants, striving to reinforce the importance of sustainable development in education and training and to provide additional support to teachers, trainers and educators. The strategy focuses on areas that require extensive cooperation within educational institutions and the combination of expertise in the field of education with that of other participants and also resources. Further resources are sought primarily via cooperation between various fields of administration, trade and industry, and NGOs.

The strategy contains plans for increasing cooperation and promoting networking at the local, regional, national and international level. Fourteen proposals for action have been recorded in the strategy. They concern strategies, the building of partnership and development centre networks, influencing basic education and in-service training, the development of learning materials and learning environments, the diversification and expansion of participation opportunities, action plans for sustainable development as well as follow-up and evaluation. A development centre network will be created by strengthening the resources of the existing organisations.

An implementation plan has been drawn up to put the proposals in motion. The start-up of the proposed support measures and the impact they have will be followed both jointly and individually field by field.

Foreword

Education and training play a fundamental role when we aim at changing the actions of humankind in a more sustainable direction. At an international level, the UN Decade of Education for Sustainable Development 2005–2014 reflects the deepening understanding of the special role education and training have.

In the autumn of 2003, The Finnish Association for Environmental Education, Suomen Ympäristökasvatuksen Seura proposed that a Sub-committee for Education be established in the Finnish National Commission on Sustainable Development. The Finnish National Board of Education (NBE) and the Ministry of Education prepared the motion for the Ministry of the Environment, and the Commission decided to establish the Sub-committee for the period 25th May 2004 to 31st December 2007 (appendix 1). The tasks defined for the Sub-committee are

- to chart out the progress of sustainable development in the school sector
- to participate in the national monitoring of the UN Decade of Education for Sustainable Development
- to participate in the preparation of themes in the Commission work programme, with particular regard to education and training for sustainable development
- to create a separate theme for the Commission work programme concerning education and training for sustainable development

The member organizations of the Commission were asked to report to the sub-committee for education. Representatives were appointed by 24 organizations. Ms. Kirsi Lindroos, Director General of the Finnish National Board of Education, was appointed as chair of the sub-committee (deputy member Ms. Heli Kuusi, Director of Division), Ms. Anna-Liisa Kiiskinen, Special Researcher of Central Finland Environment Centre was appointed as vice chair (deputy member Mr. Rainer Lahti, Senior Adviser of Ministry of the Environment). Ms. Erja Vitikka, Planning Specialist was appointed as the secretary, succeeded on 13th January 2005 by Ms. Kaija Salmio, Counsellor of Education at the Finnish National Board of Education.

The following persons were appointed as members of the Sub-committee for Education:

- Mr. Seppo Niinivaara, Counsellor of Education, Ministry of Education (deputy member Ms. Satu Heikkinen, Special Advisor)
- Mr. Petri Pohjonen, Director of Planning Division, NBE, representing also the Finnish National Commission for UNESCO (deputy member Mr. Pekka Elo, Senior Adviser)
- Ms. Marja-Leena Loukola, Counsellor of Education, NBE (deputy member Ms. Lea Houtsonen, Counsellor of Education)
- Ms. Annika Lindblom and Ms. Marina von Weissenberg, Senior Advisers, Ministry of the Environment

- Ms. Marika Palosaari, Researcher, until the 31st December 2004, Ms. Pia Rotko, Design Engineer, Ms. Marjut Partanen-Hertell, 1st January 2005 – 6th September 2005, Planning Specialist, Finland's Environmental Administration (deputy member Ms. Eeva-Riitta Puomio, Department Head, Uusimaa Regional Environment Centre)
- Ms. Marjaana Pelkonen, Senior Adviser, Ministry of Social Affairs and Health
- Ms. Hannele Kerola, Special Government Advisor, Ministry of Finance
- Ms. Johanna Selkee, Researcher (deputy member Ms. Satu Hyrkkänen), Association of Finnish Local and Regional Authorities
- Mr. Mauri Åhlberg, Professor, University of Helsinki (deputy member Ms. Taina Kaivola, Docent in Education)
- Ms. Riitta Juvonen, Assistant Director, Chemical Industry Federation of Finland (deputy member Ms. Maria Vänskä, Counsellor)
- Ms. Eeva-Maija Bergholm, Executive Director, Suomen Ympäristökasvatuksen Seura
- Mr. Tom Gullberg, Chairman, The Finnish Society for Nature and Environment
- Ms. Jaana Hiltunen, Environmental Educator, Finnish Association for Nature Conservation (deputy member Ms. Tarja Ketola, Head of Organisation)
- Mr. Jonne Karanko, Physical Education Teacher, Association of Physical and Health Educators in Finland
- Mr. Erkki Laininen, Planning Manager, OKKA Foundation
- Ms. Paula Mannonen, Project Manager until 31st December 2004, Ms. Tuula Kolari, Communications Planner 1st January 2005 – 11th September 2005, Ms. Nella Mikkonen, Planner 12th September onwards, Finnish Centre for Health Promotion
- Ms. Tarja Malmi-Raike, Environmental Educator until 31st August 2005, Ms. Tiina Suojanen-Saari, Environmental Educator 1st September 2005 onwards, WWF
- Ms. Katja Markkula, Student, Friends of the Earth
- Ms. Eija Mustonen, Quality Coordinator until 5th June 2005, Mr. Antti Turakka, Planning Specialist 6th June 2005 onwards, Service Centre for Development Cooperation
- Ms. Kaija Suonsivu, Counsellor in Research Policy, Union of Health and Social Care Professionals
- Ms. Tiina Salmio, Trainer, released 15th January – 31 December 2005, substituted by Ms. Hanna Juntunen, Trainer 15th January – 31st December 2005, Finnish UN Association
- Ms. Saara Susiluoma, Member of Board, Finnish Nature League (deputy member Ms. Minna Ertimo, Planner)
- Ms. Maija Venäläinen, President, Finnish Union of Environmental Professionals
- Mr. Kaarlo Vihinen, Special Advisor (deputy member Mr. Antti Rytönen, Special Advisor), Trade Union of Education in Finland

The Sub-committee for Education began its work by mapping out the roles various participants have in education and training for sustainable development. The sub-committee members presented the key areas of activity of their respective organizations. The external specialists present were: Ms. Saara Jääskeläinen, Researcher at the Ministry of Traffic and Communications, Ms. Marja Kokkonen, Secretary General at the Ministry of Agriculture and Forestry, Mr. Ismo Kolehmainen, Counsellor at the Ministry for Foreign Affairs, Mr. Aapo Koukku, Senior Adviser, and Ms. Susanna Tarkiainen, Counsellor of Education, at the Finnish National Board of Education, Ms. Riitta Larnimaa, Senior Policy Adviser at the Confederation of

Finnish Industries, Mr. Markku Marttinen, Director of Fishing, and Mr. Mikko Koivuranta, Fishing Biologist at the Employment and Economic Development Centre for Uusimaa, Ms. Monica Melen-Paaso and Ms. Raija Meriläinen, Counsellors of Education at the Ministry of Education, Ms. Agneta Nylund, Regional Planning Engineer at the Uusimaa Regional Council, Ms. Aili Pyhälä, Researcher at Finland's Environmental Administration, and Mr. Risto Ranki, Industrial Counsellor at the Ministry of Trade and Industry. After mapping out the current situation, the Sub-committee began work on the strategy.

The Sub-committee for Education has held 21 meetings, one of which has been a two-day working seminar. Smaller work groups have also been working on the strategy. The Sub-committee management group, consisting of the chairs, secretaries Mr. Rainer Lahti and Ms. Marja-Leena Loukola, have been preparing motions for the Sub-committee. Marja-Leena Loukola has worked as the secretary to write the strategy. The Commission approved the strategy and implementation plan on 15th March 2006.

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I part

Strategy for Education and Training
for Sustainable Development
2006–2014

1 Introduction

If we are to build our future on firm ground, we need to learn to maintain social, cultural, and economic well-being without depleting natural resources or overloading nature's delicate balance. It is the role of education and training to ensure that citizens of all ages have the knowledge, skills, readiness and vision that will enable them to build a sustainable and equitable future and commit to a sustainable way of life. It is a demanding role that will require that firm support be given to teachers, trainers and educators.

The strategy for education and training for sustainable development is a joint plan by various contributors on how to direct additional support to teachers, trainers and educators. The aim of the strategy is the amalgamation of contributors' expertise with other resources and the specific allocation of resources in pre-agreed areas. It supports expanding networking and collaboration at the local, regional, national and international level. Additional resources will be sought primarily via cooperation between different administrative fields, trade and industry, and non-governmental organizations. Other resourcing needs will be identified as the strategy is implemented.

According to research, young Finnish people are not particularly interested in influencing decision-making in society. However, young people are interested in participating in public affairs where the school functions as a participating community and young people can influence the decisions concerning their own work. The aim of the strategy is to increase genuine opportunities to participate and make a difference, both in educational institutions and in the local communities.

The timescale for the strategy covers the UN Decade of Education for Sustainable Development 2005–2014. Both national and international processes have been considered in drawing up the strategy. It is proposed that the central tenets of the strategy be included in the national sustainable development strategy currently under way as well as in the strategies of the various sectors and contributors.

The target group for the strategy are decision-makers who influence education and training at all administrative fields and at all levels of decision-making. In this way, the strategy aims at improving the readiness of teachers, trainers and educators to work for sustainable development and at enhancing insight and know-how. Changes in education and training bring about new skills in society and working life.

The Sub-committee for Education is responsible for devising the strategy and planning its implementation. The strategy challenges the Sub-committee and the organizations represented by commission members to develop education and training.

2 Background

The current use of natural resources, consumption, production and operating habits are a threat to the world's natural balance. There are also many other hazards to human well-being, health and security, caused by changes in societies and social communities. Attempts at ensuring a sustainable future for humankind are backed by numerous regulations, agreements and guidelines aimed at differing sectors. However, the productivity of the steering systems is ultimately decided by active participation of the citizens in working for change and their commitment to developing working habits. Education, training and communication hold the key to developing working habits in a more sustainable direction.

Processes between countries

International treaties and processes on sustainable development concern also education and training. The strategies of the UN, OECD, EU, the Baltic countries, the Nordic countries and Finland on sustainable development pay attention to the central role of education and training in promoting sustainable development.

The programme for action, Agenda 21, inclusive of its 40 target areas was adopted at the United Nations Conference on Environment and Development held in Rio de Janeiro in 1992. Chapter 36 of the agenda was devoted to education. It laid an important foundation to planning education for sustainable development the world over. Later the UN expanded the chapter and made it more specific and appointed Unesco as responsible for coordinating education for sustainable development within the UN organization. The Millennium Declaration of 2000 contained goals relating to the promotion of sustainable development, global partnership, and equality and quality of education. At the UN World Summit on Sustainable Development, held in Johannesburg in 2002, the programme of action emphasized the special role of education and defined education and training as decisive factors in the promotion of sustainable development.

The United Nations has declared the years 2005–2014 as the Decade of Education for Sustainable Development. The goal is to have sustainable development in the educational system of every country within the decade. As the implementation plan is global and general, a separate strategy for the decade in UN's European member states (UNECE Strategy for Education for Sustainable Development) was adopted in Vilnius in March 2005. The strategy aims to reinforce the role of sustainable development in regulations concerning education and integrate sustainable development in all education and in the operational culture of schools. At the same time it aims to enhance

know-how, the development of teaching methods and materials, and increase cooperation. In Finland, the Ministry of Education published a national strategy (Opetusministeriön työryhmämuistioita ja selvityksiä 2006:6) for the decade in February 2006.

Both the OECD and EU strategies for sustainable development emphasize the significance of knowledge, the development of decision-making systems, citizens' right to access information and opportunities to participate in decision-making.

The first Nordic sustainable development strategy, adopted by Nordic Prime Ministers and the Nordic Council, came into force in 2001. A corrected strategy (Sustainable Development – New Bearings for the Nordic Countries) was endorsed in 2004. The strategy sets long-term development goals for the period up to 2020 and describes what actions the countries should attempt to focus on between 2005 and 2008. New themes in the strategy are sustainable consumption and production habits and the social questions of sustainable development. One of the central goals of the strategy is the promotion of education for sustainable development and the integration of sustainable development perspectives in Nordic educational systems based on the principle of life-long learning.

In 2004, Finland joined the Aarhus Convention regarding citizens' access to information, right to participate in decision-making, and access to justice in environmental matters. The convention is a commitment to promote environmental education and citizens' awareness of environmental matters and their own opportunities to influence decision-making.

The Haga Declaration was given in the Council of the Baltic Sea States conference for Ministers of Education held in Stockholm in March 2000. The declaration expressed the desire that education should also be included in the Baltic 21 programme as a sector of its own. The preparation of "An Agenda 21 for Education in Baltic Sea Region – Baltic 21E" began, and in 2002 the Prime Ministers of the Baltic Sea States endorsed the programme. Its aim is that sustainable development perspectives form a natural, permanent part of the educational systems in Baltic Sea States. The Baltic 21E programme defines as the general objective of education that everyone acquire the competence to support sustainable development to meet the needs of the present population without compromising future generations' ability to meet their needs. In 2002, Finland drew up a launch plan for a national Baltic 21E programme, and in the beginning of 2006, the programme itself. The programme doubles as a national strategy for the UN Decade of Education for Sustainable Development, and it covers the entire educational system.

From environmental education to promotion of sustainable development in Finland

Finland adopted a more serious attitude toward environmental education and protection of the environment after the Conference on the Human Environment in Stockholm in 1972. The report of the Commission for Environmental Education in 1978 and the national core curriculum from 1985 raised environmental education as one of the educational goals in general education. Environmental education came to be a cross-curricular theme and also part of vocational education and training.

A working group appointed by the Finnish National Commission for Unesco formulated the National Strategy for Environmental Education in 1992. The strategy recommended measures to be taken in maternity and child healthcare, children's day-care, the entire educational system, research and scholarship, the Finnish Defence Forces, the Evangelical Lutheran Church and parishes, non-governmental organizations, trade and industry, media, and international cooperation (Kansallinen ympäristökasvatusstrategia. Suomen Unesco-toimikunnan julkaisu No. 59. Helsinki 1992).

In the 1990s, environmental education was expanded to consider all the dimensions of sustainable development. The focus shifted to the study of the ecological, economic, social, and cultural effects of human activities. It began to assess operating habits critically and to search for new solutions considering all the dimensions of sustainable development simultaneously. The revised core curricula of the new millennium state that sustainable development must be included in the teaching of all subjects, and the school's operational culture must support learning.

3 Sustainable development in education and training

The Constitution of Finland states that everyone is responsible for nature and its biodiversity, the environment and cultural heritage. Education and training must develop the abilities to take responsibility for both environmental and human well-being.

3.1 The goal of education and training for sustainable development

Education and training for sustainable development aspire to develop the knowledge, skills, readiness and vision necessary to assume a sustainable way of life, as well as to build a future with citizens cognizant of the basic preconditions of sustainable development.

The goal is:

- to increase the understanding of the connection between human well-being, economy and protection of the environment, aiming at an eco-effective welfare society
- to increase the understanding of our own cultural heritage, different cultures, justice and preconditions for trust between human groups, as well as to develop abilities for intercultural and international interaction
- to enhance readiness to detect changes in the environment, society and human well-being, as well as to identify their causes and consequences in both our immediate environment and at the global level
- to effect changes in daily practices and a commitment to a sustainable way of life
- to improve the readiness and motivation to participate and influence decision-making as a citizen and member of the work community and other communities
- to provide the sort of vocational skills in different fields of vocational education that create the prerequisites for developing each branch of industry in a more sustainable direction

Building the future on ecologically, economically, and socio-culturally sustainable grounds necessitates the ability to perceive and understand things in their entirety. It calls for a wide knowledge base of how society, trade and industry, and the natural environment work, how decisions are made, and what opportunities a citizen has to influence decision-making. It also requires the ability and courage to assess current practices critically and change practices in private life, educational institutions, public affairs, work, and free-time environments. The builders of a sustainable future need to

have insight into the extent of the need for change and an ethical responsibility for national and global equality and distribution of well-being. Diverse skills in information acquisition, problem solving, communications, critical and innovative thinking, and the ability to reconcile different interests and handle conflicts are required.

The challenge of more holistic learning becomes tangible in cross-curricular collaboration, development of daily practices and operational culture, and more frequent interaction with the surrounding society. The courage to grapple societal and economic issues and an ability to see the local activity in a global framework are necessary. Everyone must gain experience of shouldering responsibility, participating and making a difference in public affairs at a young age. In cooperation, all parties gain experience of what it is to build a sustainable future in multi-vocational collaboration. Citizens used to making sustainable choices and committed to a sustainable way of life are the driving force of change in all the phases and tasks they meet in their lifespan.

3.2 Sustainable development in the steering of education and training for sustainable development

Political and administrative steering

The Council of State defines the general lines of educational policy and draws up the development plans. Every four years it endorses a plan for the development of Ministry of Education training in the field of administration and development of research and scholarship in universities. The development plan Education and Research 2003–2008 states that sustainable development shall be promoted in education and research. In February 2002, the Council of State gave a Decision in Principle Concerning the National Policy Definition on Early Childhood Education and Care.

Legislative foundations guarantee universities, polytechnics and liberal adult education institutions independence in operational preconditions regarding the contents of education, research and development work. The Ministry of Education concludes a performance agreement with each university and polytechnic every three years. The Ministry of Education has made promotion of sustainable development an agreement paragraph.

In the Finnish Government Programme for Sustainable Development (1998), research and education are among the fields of activity. The programme emphasizes the importance of cooperation between education and experts of different fields.

The Ministry of Education published February 15th 2006 the report Sustainable development in education; Implementation of Baltic 21E programme and Finnish strategy for the Decade of Education for Sustainable

Development (2005–2014). It contains policy definitions for the whole educational system.

A working group appointed by the Ministry of Education made a proposal in 2006 for a national action plan for Global Education. One of the activity areas included in the Global Education 2010 programme is education, which promotes the ability to perceive the world as a whole with limited natural resources; a world in which we need to learn to save resources and distribute them fairly, equally, and equitably.

The Finnish National Board of Education (NBE) devised a programme to promote sustainable development in the periods 1998–2002 and 2002–2004. The programmes presented the obligations of education in sustainable development and described the development programmes and other actions coordinated by the National Board of Education.

In its 2015 strategy of social and health policy, The Ministry of Social Affairs and Health commits to aiming at a socially robust and economically sustainable society, effective and dynamic in its actions.

The task of the Ministry of the Environment is to promote sustainable development. One of the tasks of Finland's environmental administration and regional environment centres is the promotion of environmental awareness. The Central Finland Environment Centre is responsible for national cooperation and expert work which supports environmental education and are part of the duties of environmental administration. The policy definitions for 2006–2010 are presented in the development plan for environmental education and in the strategy plan for (environmental) communication.

With respect to local environmental administration, the law states that local environmental authorities are, for their part, responsible for the dissemination of information, education and training regarding environmental protection in the municipality. The Local Government Act states that local authorities shall strive to promote the welfare of their residents and sustainable development in their areas. In a 1997 Strategy for Sustainable Development adopted by the Association of Finnish Local and Regional Authorities (revised in 2001), the importance of collaboration between sectors and the integration of sustainable development perspectives in municipal planning are emphasized.

Curriculum steering

In compliance with laws, decrees, and the approved distribution of lesson hours, the Finnish National Board of Education draws up the national core curriculum for basic, upper secondary and upper secondary level vocational education and training and the foundations of degrees for vocational education. NBE also approves the core curricula for pre-school education and both the morning and afternoon activities of school-goers. Based on the core cur-

ricula, local authorities and other education providers devise their own curricula which are specified and complement the aims and core contents. Teachers implement the aims and contents of the adopted curriculum in the classroom.

Cross-curricular themes are key areas in educational work. Their aims and contents are incorporated into several subjects and they pose a challenge to integrate instruction. Sustainable development is a cross-curricular theme in the national core curriculum for basic education, adopted in 2004, for upper secondary education, adopted in 2003, and for basic and upper secondary education for adults, adopted in 2004. Sustainable development must be included in the local curriculum work in the common and optional subjects and in common events, and it must be apparent in the school's operational culture. The central tenets in both the curricula for basic and upper secondary education are the development of environmental literacy and future thinking, a sustainable way of life and learning to participate in public affairs and influence decision-making.

In vocational education and on-the-job learning, promotion of sustainable development is an common emphasis in all fields. Four credits of environmental knowledge can be included in optional studies. Knowledge of environmental skills is part of the vocational skills in one's own field. The beginning of 2006 will see an act regarding the implementation of the demonstration of vocational skills bring forth sustainable development in each vocational field.

Following policy lines drawn in the 2002 Decision in Principle of the Council of State, the National Research and Development Centre for Welfare and Health (Stakes) has devised a core curriculum for early childhood education. Central in early childhood education is the reinforcing of behaviour and actions whereby others are taken into account, as well as to support children's well-being, growth and learning.

Other steering

The Ministry of Education is responsible for the development of educational, science, cultural, sport and youth policies and international cooperation in these fields. It also defines the allocation of resources. The Finnish National Board of Education supports the curriculum work of the schools and educational institutions and the implementation of environmental systems via training, production of learning materials, networking support, and a web-service on sustainable development. The national core curricula and foundations of degrees, in turn, steer the producers of learning materials and degrees, teacher trainers and the initiation of development projects.

Research, scholarship and assessment provide new perspectives to the development of education and training. Researchers and scholars are in-

volved in many school development projects. New innovations are generated in national and international projects and programmes.

There is a vast and diverse selection of information steering products and services in environmental administration. Environmental education, training, dissemination of information, public discussions, and the generation and distribution of scientific knowledge about the environment are among the most important forms of action. The administration provides library, information and web-services. Training, visits and theme days are organized for schools. The administration also participates in local, regional, national and international cooperative projects. National parks and other reservation areas and their nature centres are important learning environments for people of all ages. Environmental awareness is promoted particularly through extensive distribution of information in the media.

Metsähallitus, a state enterprise whose primary tasks are to supply wood to the forest industry and manage most of Finland's protected areas, is in charge of nature guide services in Finnish national parks. The National Board of Antiquities provides services for cultural heritage education. Also other fields of administration approach educators and offer to provide schools with the latest information and various information packages to support learning, as well as challenge schools and educational institutions to participate in multivocational activity. Connections to working life are a prerequisite of development for vocational education and training. They are also an important connection for general education.

The Finnish Association for Environmental Education promotes education for sustainable development and coordinates the activities of organizations in the field. The objective is to support and promote the educational work of organizations, improve the dissemination of information, and reduce overlaps in the activities of organizations. At the same time, it strives to create a common understanding among the organizations of what good education for sustainable development is. The association hosts a nature school group and a network of researchers in the field. It promotes interaction between researchers and educators.

Nature and environmental schools support the environmental education work done in schools and day-care by teaching ecological literacy. The teaching takes place in the nature or other environments relevant to the instructional themes and is active learning, hands on and learning through experience. At the moment there are 24 nature and environmental schools in Finland. The network covers mainly the biggest cities in Southern Finland. The most important target groups of nature schools are the pupils and teachers in pre-school and basic education.

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structional themes and is active learning, hands on and learning through experience. At the moment there are 24 nature and environmental schools in Finland. The network covers mainly the biggest cities in Southern Finland. The most important target groups of nature schools are the pupils and teachers in pre-school and basic education. Special environmental systems have been designed for schools. The Green Flag is an international programme of environmental education with the purpose of developing ecological everyday practices and furthering the participation of children and young people in decision-making. In Finland, Suomen Ympäristökasvatuksen Seura is responsible for the programme and the Finnish Society for Nature and Environment (Natur och Miljö) serves the Swedish-speaking participants. The Environmental Criteria for Schools and Educational Establishments were completed in 2003 and the environmental certification system in 2004. The certification has been created for schools in cooperation with the OKKA foundation, the Trade Union of Education in Finland, the Finnish National Board of Education, Hyvinkää-Riihimäki Vocational Adult Education Centre and SYKLI Environmental School of Finland. The criteria deal with management, teaching and maintenance activities..

Trade and industry, trade organizations, civic organizations, parishes and hobby organizations support teachers, trainers and educators in many ways and take responsibility for the promotion of sustainable development in their actions. The expertise of these participants in supporting education can be seen in the programmes, projects, learning materials, in-service training, club activities and the morning and afternoon activities of school-goers. Organizations stimulate participation in public affairs and civic activity.

3.3 National reviews of sustainable development in schools and educational institutions

A nation-wide review of environmental education and education for sustainable development has been carried out in Finland three times. According to the reviews, in the beginning of the 1990s teachers found deficits in the curriculum, negative attitudes, lack of training, material, and money to be the central impediments to environmental education. At the turn of the millennium the named impediments were lack of money, time, and training.

Report on the state of environmental education in 1992

By order of the Ministry of Education, the Finnish National Board of Education reported for the first time in 1992 on the state of environmental education in Finland. The report was made for a survey of OECD countries. A survey prepared by NBE and the University of Lapland was sent to all State Provincial Offices and local authorities and to a sample of 5 per cent of primary schools and 10 per cent of general upper secondary schools and vocational institutions. Every State Provincial Office, 61 per cent of the local authorities and 64 per cent of the schools responded to the survey (Selvitys ym-

päristökasvatuksen tilasta Suomessa. Opetushallituksen julkaisusarjat, raporttisarja 28/1992).

The responses indicated that nearly all the State Provincial Offices had a person responsible for environmental education at that time. The State Provincial Offices were supporting local authorities in drawing up plans for environmental education, organizing training and providing expert and material assistance to schools. Local authorities had not made environmental education plans of their own but several school projects were running. Local authorities had created or acquired various materials for use in schools.

The majority of schools had some experience of environmental education. They had arranged theme days and had learned how to make compost. Some had participated in larger projects. Few schools had experience of systematically developing environmental education over several years. Teachers found curriculum deficits, negative attitudes, and the lack of training, material, and money to be the worst obstacles to environmental education. Large teaching groups and lack of time were also seen as obstacles. Theme days, campaigns and projects were named as the best forms of environmental education.

Review of the implementation of sustainable development in 1999

In 1999, the Finnish National Board of Education arranged a thematic review of the state of sustainable development in about 500 educational institutions. The goal of the review was to find out what sustainable development there is in the written curricula, what kind of training has been provided and acquired in sustainable development, what kind of cooperation is made in it, and whether daily practices are in line with the principles of sustainable development. (Toteutuuko kestävä kehitys kouluissa ja oppilaitoksissa? Antti Rajakorpi & Kaija Salmio (ed.). Opetushallitus. Arviointi 3/2001)

The review showed that sustainable development was visible in more diverse ways in the curricula for vocational education than in the curricula for general education. Vocational institutions had more school-specific sustainable development programmes and these were often part of the institution's quality assurance system.

For the most part, vocational, general education and liberal adult education establishments provide education for sustainable development as cross-curricular integration. Only about 30 per cent of the schools that responded said they had participated in in-service training dealing with environment matters or sustainable development. Most of the training was short-term and meant for teachers. Vocational institutions were best at seeing to their staff's training. In-service training considerably improved the implementation of principles of sustainable development in everyday practices. About a third of schools had appointed a team or contact person to organize the implementa-

tion of sustainable development or environment matters. This helped in the adoption of concrete actions in sustainable development. Similarly, it was helpful if the schools had a working connection to the local authorities. Value perspectives did not come up in this data.

Review of the preparation of Baltic 21E programme in 2002

In 2002 an English language review of the whole education system was published by the Ministry of Education. The review was part of the Baltic 21E programme's background work (Education for sustainable development in Finland. Marja-Leena Loukola, Simo Isoaho, Kaisa Lindström, Ministry of Education 2002).

The review of education at the basic and secondary level was based on the Finnish national Board of Education review made in 1999 and on more recent project evaluations. Teachers found lack of money, time, and training to be the worst impediments to the implementation of sustainable development.

A survey on the implementation of sustainable development was administered to polytechnics, universities and liberal adult education institutions. In tertiary level education, the main focus was on environmental know-how and an interdisciplinary perspective on sustainable development was still seeking its role. In liberal adult education, there was great variation in the commitment to promoting sustainable development. The obstacles named by teachers ranged from educational policy to lack of interest.

4 Vision

Sustainable way of life in a sustainable society

The vision of education and training for sustainable development is one of citizens committed to a sustainable way of life, citizens whose knowledge, skills, and motivation for sustainable development are furthered by relevant education integrated in all education and training

Citizens committed to a sustainable way of life shoulder the responsibility of developing new sustainable operating practices and environments in various tasks and in every phase of their lifespan. They are able to weigh up the ecological, economic, social, and cultural impacts of choices in practical situations, both at the local and global level. The citizens form a society where human physical, mental, social, cultural, and economic well-being is cherished without reducing nature's biodiversity and natural resources or overloading nature's delicate balance.

5 Targets for development

This strategy shall reinforce the value of education and training for sustainable development and direct support to teachers, trainers and educators in the development of skills and learning environments. The strategy focuses on targets requiring more extensive collaboration among teachers, trainers and educators and the bringing together of expertise and resources from other fields as well as that of the field of education. The goal is that the targets of development proposed in the strategy be made tangible in the strategies and action plans of the various participants. The implementation of the proposals will be followed and the results assessed both jointly and individually field by field.

5.1 Additional support for development work

National strategies and plans

Organizations and fields of administration define the key points of their action and development in their strategies. The themes named as focal points receive the majority of development resources. This is why it is important to highlight education and training for sustainable development as focal points in educational and social and health administration, and to obtain the strategic support of organizations and other fields of administration for teachers, trainers and educators.

Sustainable development as a
key area in educational strategies

Support for education and training in the strategies of other
participants and other fields of administration

(1) The Sub-committee for Education proposes

that education and training for sustainable development be defined as focal points in the strategies of educational and social and health administration and that the central goals of the strategy be included in the national strategy of sustainable development which is currently under way.

(2) The Sub-committee for Education proposes

that universities and vocational teacher training colleges include the basic knowledge and pedagogic skills of sustainable development in the curricula and study programmes of basic training given to all teachers and advisors. *The Sub-committee for Education proposes* proposes that education and training for sustainable development be defined in the plans of in-service training for educational staff as an important area of educational policy and that it be included in the plans of in-service training for educational leadership.

(3) The Sub-committee for Education proposes

that support for education and training for sustainable development be written in the strategies and action plans of other participants and other fields of administration.

Building partnership and development centre networks

At the state level, various ministries and organizations support projects, in-service training of staff, and non-governmental organizations in the field of education and training for sustainable development. They also coordinate relevant programmes. To ensure an efficient use of resources, eliminate overlaps and clarify everyone's role, a plan on the implementation of cross-administrative cooperation and distribution of work and a plan of regular contact and information dissemination are needed.

In teacher training, a special unit promoting education and training for sustainable development is needed as a centre for resource and innovation. Its task will be to promote the integration of sustainable development in both the basic and in-service training of teachers, trainers and other educators in accordance with our international agreements. It will also coordinate the work done in the networks for the development of education and training for sustainable development in Finland. The centre will cooperate with vocational teacher training colleges. It shall participate in UN operations at the international level through applied educational research promoting sustainable development and through working proactively in networks that best serve the development of the field of education and training, in Finland and beyond.

Teachers, trainers and educators need permanent support in education and training for sustainable development. Regional cooperation networks and development centres are needed to find out the need and opportunities for collaboration and expert support, to gather and pass on good practices, to give factual and methodological support and to organize development work and interaction. A network of development centres will be created by reinforcing existing resources so that they can enhance their know-how and coordinate long-term development work.

Identifying local strengths and needs and developing cooperation among various participants is part of the work of the education provider. As the project to restructure municipalities and services is implemented, partnerships among nature and environmental schools, organizations giving basic art education, various cultural institutions, NGOs, media, specialists in various fields of administration, parishes, experts in trade and industry, schools at various levels, morning and afternoon activities, and early childhood education should be planned and steered more efficiently. Becoming acquainted with the local environment and local participants creates an important foundation for education aimed at a sustainable way of life

National level:

- Plan for the implementation of cooperation among fields of administration and other relevant participants
- Resource and innovation centre in teacher training
- Gathering and passing on development ideas and new solutions

Regional level:

- Regional cooperative groups
- Regional development centres
- Gathering and passing on development ideas and new solutions

Local level:

- Cooperation among day-care centres, schools and educational institutions
- Cooperation between schools and other local participants
- Gathering and passing on development ideas and new solutions

(4) *The Sub-committee for Education proposes*

that a plan be made by autumn 2006 of establishing communication between various fields of administration and other relevant participants at the state level with the aim of purposefully directing resources and various kinds of expertise towards the targets for development proposed in the strategy.

Also, an agreement shall be sought on how to improve the gathering of development ideas and new solutions and how to pass them on by utilising the networks and channels of communication of various participants. Collaboration with the media will continue.

(5) *The Sub-committee for Education proposes*

that universities jointly name one teacher training unit as the national research and development centre for education for sustainable development. A resource and innovation centre shall be established in the unit and the university in question shall apply for it to receive the status of a regional centre of the United Nations University based in Tokyo.

(6) *The Sub-committee for Education proposes*

that the formation of regional cooperative groups for education for sustainable development be continued. By the end of 2006 the regional research and development centres shall have found units to specialize as development centres. *The Sub-committee for Education proposes* that a comprehensive network of regional development centres be created in Finland. The development centres shall be regional concentrations of know-how and they shall gather and pass on development ideas. Connections with universities and polytechnics are important.

(7) *The Sub-committee for Education proposes*

that local collaboration in the enhancement of sustainable know-how be reinforced during the implementation of the current project to restruct-

ture municipalities and services. Cooperation among day-care, schools and educational institutions shall be reinforced, as well as their connections to nature and environmental schools, organizations providing basic art education, NGOs and associations promoting themes of sustainable development, media, research, and experts in various fields of administration and trade and industry. An agreement shall be made on how new solutions and development ideas should be gathered and passed on.

5.2 Development of know-how

Influencing basic and in-service training

The know-how of teachers, trainers and educators is fundamental in assuming a sustainable way of life. Discussion of the basic questions of sustainable development must be included in both the basic and in-service training of educators, teachers and tutors in all fields and levels, and equally in the training of guides, advisors and communications professionals. Reinforcement of knowledge and pedagogic skills is necessary. Diverse skills in participation, participatory education, empowerment, teaching responsibility and commitment, and the ability to work in a multivocational group are needed.

Sustainable development for the basic and in-service
training of teachers, trainers and educators

(8) The Sub-committee for Education proposes

that information, skills and abilities relevant to the promotion of a sustainable way of life be included in the basic and in-service training of teachers, trainers and educators across all fields and school levels, and similarly in the training of communications professionals.

Development of learning materials

Besides textbook publishing houses, materials suitable for use in instruction are also produced in various fields of administration, non-governmental organizations, corporations and projects. In electronic environments, national and international information sources are made available to everyone. In the flood of information it is difficult to assess the reliability of the information. Finding good material and revising it into teaching material is often laborious. Revising it into material that enhances the understanding of sustainable development and instructs in sustainable decision-making and in assuming a sustainable way of life requires collaboration between pedagogues and producers of information. More efficient dissemination of information on good learning and source materials is needed.

The selection and use of learning materials are an important part of sustainable everyday life. Besides the contents, the sustainability of their pro-

duction and usability is an important selection criterion. The selection and use of learning materials is part of learning for sustainable consumption.

In partnerships within the school community and also with external parties there are various questions of practical arrangements and responsibility. Experience shows the core advantages, difficulties and obstacles to partnerships. Guidelines with information and advice on how to ease the organizing of partnerships are needed.

Developing learning materials that support the
building of a sustainable future

Sustainable life-span of learning materials

Multidisciplinary and multivocational work practices
place new demands on learning materials

(9) The Sub-committee for Education proposes

that a survey be made of information sources and learning materials used in schools and that their suitability be assessed from the perspective of reconciling different dimensions of sustainability and furthering the adoption of a sustainable way of life.

Information on good source materials will be distributed. The Sub-Committee also proposes that guidelines be created for the implementation of cross-curricular instruction and cooperation with external parties.

5.3 Development and enlargement of learning environments

Society as the learning environment

In order to feel in control of our lives, take responsibility, have a sense of community and a future orientation, we must be able to see the structure of society and have insight into the needs of the various participants and what responsibilities and roles each one has in decision-making.

It is important to become familiar with various living and working environments, to learn how services and leisure time activities are produced and how decision-making and administration work. It is important to learn of the state of the natural environment and learn to see the local community as a whole. Furthermore, it is important to see how our local community is connected to and dependent on other regions and the state and functioning of the whole world. A realistic sense of human well-being, the working of democracy, the stability of the economy and the state of the environment in our local community create a good basis on which to assess and envisage future plans with an eye on their ecological, economic, cultural and social sustainability.

Creating contacts and planning forms of partnership with local participants takes time and many forms of enquiry and settlement on the part of the staff in day-care centres, schools and educational institutions. Starting a partnership is easier when all the partners are aware of the meaning, goals and benefits of the partnership. Contact persons are needed and more use must be made of the opportunities offered by information and communications technology. Also authentic opportunities for research, planning and participation in public affairs dealing with concrete matters are needed. Real experiences of successfully expanding the learning environment to the world outside the school walls are important. Every field of administration, every participant should see to it that successful partnership models spread out, new ones are developed and partnerships encouraged within their own field.

Partners are needed for the enlargement of learning environments

New technology and e-learning environments
diversify and enlarge networks

(10) *The Sub-committee for Education proposes* that partnerships among day-care centres, schools, educational institutions and organizations at the local level be developed with the objective of enlarging the learning environment in society. The Sub-Committee proposes that efforts be made to enable children, young people and adult students to participate in local development. New technology shall be made use of in diversifying interaction and networking. The goal is that every school should have working partnerships with external parties by 2014.

Participatory and active citizenship

The knowledge and use of various means to participate and influence public affairs is essential to the development of democracy and the building of a sustainable future. Learning to participate begins with understanding the impact of our actions, participating in the planning of our work community and in implementing the plans. It continues as civic activity and involvement in various affairs in the different phases of life. All children and young people need to gain experience of taking responsibility and dealing with common concerns within their community and in the community outside school. It is important to learn to see the impact of small, local actions, even on a world-wide scale. Participating in national and international projects supports the growth of world citizenship. It gives insight into global environmental and development matters and the needs and opportunities to distribute welfare more fairly.

Sustainable future through participation and involvement

- (11) *The Sub-committee for Education proposes* that the spread and establishment of existing successful means to participate and influence matters in educational organizations are furthered and the development of new means to participate and influence are promoted, for instance, through developmental research.

Sustainable development programme of action for every educational institution

whole work community devise together a programme of action for sustainable development. The preparation of the programme starts with surveying the current situation, on the basis of which development action decisions will be made. Development actions deal with management, teaching and daily practices. It is important for learning that teaching as well as the operational culture support growth towards a sustainable way of life and the learning of sustainable consumption habits. Preparing a programme of action requires persistent work, multivocational cooperation and the definition of responsibility areas.

Sustainable development programme of action deals with management, teaching and daily practices

- (12) *The Sub-committee for Education proposes* that a sustainable development programme of action be drawn up in every educational organization by 2010. It should be part of the budget and action plan and quality assurance. The aim is that 15 per cent of day-care centres, schools and educational institutions should have received an external acknowledgement or certificate for their sustainable development activity by 2014.

6 Follow-up work and evaluation

The aim of follow-up work and evaluation is to gain regular information about how support measures proposed in the strategy are put into practice and how skills, learning environments and cooperation among schools and other participants develop. The progress of education and training for sustainable development at the international level shall also be followed. The effectiveness of support measures shall be evaluated with quantitative as well as qualitative methods. A follow-up and evaluation system with indicators shall be planned for data collection. The revision needs of the strategy shall be assessed.

Follow-up work and evaluation shall also be carried out in the regional development centres and as part of local evaluation, quality assurance and use of certification systems. Sustainable development perspectives shall be incorporated into the existing evaluation work in order to be able to follow up on the change.

To be followed and evaluated:

- putting support measures into practice
- development of know-how
- development of learning environments
- development of partnerships among schools and other participants

(13) *The Sub-committee for Education proposes* that collaboration be established to assess how the actions proposed for follow-up work, data collection, assessment and feedback systems are implemented, and what impacts the implemented actions have.

(14) *The Sub-committee for Education proposes* that learning results be assessed in the middle of the programme period.

Part 2

Strategy for Education and Training for Sustainable Development Implementation Plan 2006–2014

7 Actions and responsibilities in the implementation of development work

7.1 Support for development work

7.1.1 National strategies and plans

(1) *The Sub-committee for Education proposes*

that education and training for sustainable development be defined as a key area in educational, social and health administration strategies and that the main goals of the strategy be included in the national sustainable development strategy currently under way.

(2) *The Sub-committee for Education proposes*

that universities and vocational teacher training colleges include basic knowledge of and pedagogic skills in sustainable development in the curricula and study programmes of all teachers and advisors. *The Sub-committee for Education proposes* that education and training for sustainable development be defined in the plans of in-service training for educational staff as an important area in terms of educational policy and that it be included in the in-service plans for educational leadership.

The Sub-committee for Education believes that the following measures are needed:

- *Educational administration* shall strengthen the status of education and training for sustainable development by making it a key area in educational administration strategies, action plans and plans for in-service training for educational leadership. At the national level, important strategies are the Ministry of Education strategy for research and education and the Finnish National Board of Education strategy. The performance agreements made by the Ministry of Education with universities, polytechnics and the NBE are also important in defining the key areas. Local strategy is supported by the educational administration's national strategies and local needs dictate its application.
- *Universities and vocational teacher training college* shall strengthen sustainable development know-how by including *a knowledge base of sustainable development and pedagogic skills therein in the plans of basic and in-service training of all teachers, tutors, and educational leadership.*
- *Social and health administration* shall strengthen education for sustainable development by including *all the dimensions of sustainable development in early childhood education plans and strategies and plans regarding health education and advice.*

- The central role of education, training and communication in the promotion of sustainable development and additional support for development work shall be recorded in the national sustainable development strategy and in the government programmes of subsequent *governments*.

(3) *The Sub-committee for Education proposes*

that support to education and training for sustainable development be recorded in the strategies and action plans of other fields of administration and other participants.

The Sub-committee for Education believes that the following measures are needed:

- *The environmental administration*, whose central task is to promote sustainable development, shall *model commitment to sustainable modi operandi and actively spread sustainable modi operandi* to other fields of administration and among various societal participants. As part of information steering and other administrative means of steering, *school partnerships and the importance of the educational task shall be strengthened* in accordance with the environmental administration's development plan for environmental education currently under way.
- *Other fields of administration* shall commit to *support the promotion of sustainable practices and sustainable choices and school partnerships* within the scope of their area of responsibility and expertise. Each field of administration shall be responsible for clarifying sustainable development and education or the importance of its support in their own strategies and action plans.
- *Trade and industry* shall support *school partnerships partnerships and promote the development of sustainable practices*. Trade and industry shall be responsible for furthering environmental know-how in one's own field as *part of on-the-job-training*.
- *Trade union confederations* underline the role of education in promoting sustainable development and *promote education for sustainable development* in their actions and *recommend sustainable practices and circumstances*.
- *Organizations' strategies and action plans* shall define their *responsibility in educating for sustainable development* from the perspective of their own particular section. Organizations shall be urged with both information steering and economic incentives to increase activities aimed at a sustainable way of life.
- *The Sub-committee for Education* shall arrange a *seminar in spring 2006*. In the seminar, the strategy for education and training for sustainable development and the collaboration proposed therein for the building of a more sustainable way of life shall be presented to decision-makers and those responsible for the strategies of various participants.

7.1.2 Building partnership and development centre networks

(4) *The Sub-committee for Education proposes*

that a plan be made by autumn 2006 on establishing permanent interaction among different fields of administration and other relevant participants at the state level with the objective of purposefully directing resources and expertise of all kinds towards the targets for development proposed in the strategy. Increasing the efficiency of gathering and passing on development ideas and new solutions shall also be agreed on, making use of the networks and information channels of various participants. Collaboration with the media will continue.

The Sub-committee for Education believes that the following measures are needed:

- *The Ministry of the Environment and the Ministry of Education/NBE shall start planning and organizing regular interaction among fields of administration and organizations at the state level.* Current practices shall be mapped out and modi operandi shall be developed. Roles shall be clarified as to how resources are allocated to NGOs and national and international projects that are deemed mutually important. There will be a clarification of how the model developed in the Oak of Finland network, in which the National Board of Antiquities, the Finnish National Board of Education, the Ministry of the Environment and local cultural education participants successfully promote culturally sustainable development, could also be applied to other themes. It shall be agreed on how development ideas could be more efficiently passed on. Human and economic resources shall be reserved for coordination. The National Board of Education sustainable development web-service shall be used as a key information channel at the national level. Evaluation and development forums on education and training for sustainable development shall be arranged with the objective of increasing contact between different projects and networks.
- *Organizations shall be urged to cooperate and network* to increase the effectiveness of their work.

(5) *The Sub-committee for Education proposes*

name one teacher training unit as the national research and development centre for education and training for sustainable development. A resource and innovation centre shall be established in the unit, and the university in question shall apply for it to receive the status of a regional centre of the United Nations University, based in Tokyo.

The Sub-committee for Education believes that the following measures are needed:

- *Universities shall jointly name a teacher training unit as a developer of education and training for sustainable development* and apply for the re-

sources needed for the task. A resource and innovation centre for the promotion of education and training for sustainable development shall be established in the unit, and the university in question shall apply for it to receive the status of a regional centre of United Nations University, based in Tokyo. The centre shall coordinate cooperation among teacher trainers in universities and polytechnics and work at both the national and international level. It shall also coordinate and support the work of regional development centres in Finland.

(6) *The Sub-committee for Education proposes*

that forming regional partnership groups in education and training for sustainable development be continued. The partnership groups shall draw up regional action and development plans by the end of 2006 and find units to specialize as development centres. The Sub-Committee for Education proposes that a comprehensive network of regional development centres be created in Finland. The development centres shall be regional concentrations of know-how and they shall gather and pass on development ideas. Contacts with universities and polytechnics are important.

The Sub-committee for Education believes that the following measures are needed:

- *The Ministry of the Environment, the Finnish National Board of Education, and regional participants* shall continue forming regional partnership groups and support them in starting to work for education and training for sustainable development. Partnership groups shall draw up regional action and development plans, participate in mapping out the units that wish to become development centres, and support the work of the regional development centres.
- *The Ministry of the Environment, the Ministry of Education/ NBE, and regional participants partnership groups in education and training for sustainable development* shall start mapping out *the resources and expertise in existing organizations* with the purpose of finding organizations that have the resources and desire to develop into regional development centres. A regional development centre can be one physical unit or, for instance, a partnership network of several participants. Resourcing of the development centres shall be agreed on together with regional participants, and partners shall be sought to increase resources and expertise. Opportunities to seek financing from the EU in collaboration with regional councils shall be studied.

(7) *The Sub-committee for Education proposes*

that as the planned restructuring of municipalities and services takes place, local cooperation be reinforced to increase sustainable development know-how. Cooperation among day-care centres, schools and educational institutions shall be reinforced. Likewise, their contacts to nature and environmental schools, organizations providing basic art educa-

tion, NGOs and associations promoting sustainable development themes, the media, experts and research in various fields of administration and in trade and industry shall be reinforced. It shall be agreed on how new solutions and development ideas are gathered and passed on.

The Sub-committee for Education believes that the following measures are needed:

- *The Sub-committee for Education recommends that local authorities reinforce local cooperation, with the aim of establishing a wide network of partnerships and expert support to teachers, trainers and educators involved in education and training for sustainable development. The partnership network can be planned as part of the project to restructure municipalities and services.*
- *The Ministry of the Environment, Ministry of Education/NBE, and Association of Finnish Local and Regional Authorities shall start negotiations on developing nature and environmental schools and guaranteeing that their work will continue.*
- Schools and educational institutions, for example in the field of nature and the environment, shall be encouraged to specialize as *sustainable development schools*. Through development projects in *vocational further education and training and in liberal adult education*, the sustainable development perspective shall be *promoted in the development of adults' know-how*. Furthermore, the meaning of sustainable development shall be reinforced in vocational training for competence-based qualifications.

7.2 Developing know-how

7.2.1 Basic and in-service training

(8) *The Sub-committee for Education proposes*

that information, skills and abilities relevant to the promotion of a sustainable way of life be included in both the basic and in-service training of teachers, trainers and educators across all fields and all school levels, and similarly in the training of communication professionals.

The Sub-committee for Education believes that the following measures are needed:

- *Those in charge of teacher training at all levels and in all fields shall include in both the basic and in-service training of teachers and in educational leadership a relevant knowledge base and pedagogy for assuming a sustainable way of life. A person responsible for sustainable development shall be named in every teacher training unit and the preconditions necessary for his or her action shall be provided. It is also important to increase sustainable development know-how in the training of professionals in early childhood education and communications.*

- *The Ministry of Education* shall name sustainable development as a *key area in the in-service training of teachers in terms of educational policy*.
- *The Ministry of the Environment* shall use performance management to ensure that Finland's environmental administration, regional environment centres and Metsähallitus' nature protection and recreation services have the opportunity to do their part by making their knowledge and expertise available.
- Sustainable development studies shall be added to further training and training for teachers arranged by *other fields of administration*.

7.2.2 Developing learning materials

(9) The Sub-committee for Education proposes

that information sources and learning materials used in schools and educational institutions be mapped out and their usability be assessed from the perspective of reconciling different dimensions of sustainability and guiding pupils/students in assuming a sustainable way of life. Good source material shall be passed on. *The Sub-committee also proposes* that guides be created for the implementation of cross-curricular instruction and partnerships with external participants.

The Sub-committee for Education believes that the following measures are needed:

- *A research project* shall be started to study how the promotion of sustainable development and sustainable habits of living are treated in today's learning materials. It shall also be studied what learning and source materials are being used in schools and educational institutions. The sustainability of both the means of production of the learning materials, and how it is taken into consideration in choosing learning materials, shall be studied.
- Work will begin on creating *guides* for educators and teachers. Knowledge of approved practices and new ideas for cross-curricular instruction, its implementation, unifying instruction and operational culture and multivocational work practices shall be passed on. Similarly, ideas are needed for organizing partnerships among schools and external partners. Partners need information on school work practices and the goals of instruction. Schools need information on the goals of partners and the opportunities for partnerships. Everyone needs information on the different ways to organize partnerships and questions of responsibility. The goal is to make it easier to launch partnerships. *The Ministry of Education/National Board of Education, universities, and the Trade Union of Education in Finland* shall begin the work.
- *Information* on good source and learning materials shall be *passed on* via the National Board of Education web-service.

7.3 Developing and enlarging learning environments

7.3.1 Society as the learning environment

(10) *The Sub-committee for Education proposes* that partnership models at the local level among day-care centres, educational institutions and other organizations be developed, with the objective of enlarging the learning environment in society. Efforts shall be made to enable children, young people and adult students to participate in local development work. New technology shall be made use of in diversifying interaction and networking. The goal is that every school and educational institution should have working partnerships with external parties by 2014.

The Sub-committee for Education believes that the following measures are needed:

- *Experiences of partnerships* among day-care centres, schools and educational institutions and other local participants shall be gathered. Partnership opportunities with, for instance, museum authorities, cultural, land use planning, environmental, social welfare and health, security and consumer authorities, local media, nature schools and centres, companies and NGOs shall be studied. *The organizations behind the members of the Sub-committee for Education* shall commit to spreading good practices in their own areas of responsibility.
- *Use of electronic learning environments* in increasing contacts with the surrounding society and international forums shall be developed. *Open learning environments*, where differing types of learners meet, shall be developed.
- *Communications campaigns* shall be continued both to ease the making and establishing of choices that promote sustainability and to expand collaboration between different sectors. Communication research expertise and advertising techniques shall be made use of. *The Ministries of Trade and Industry, Education, the Environment, and Transport and Communications, regional environment centres, Metsähallitus' nature protection and recreation services, local authorities, NGOs, the Finnish Consumer Agency and the Council for Ethical Advertising* are responsible for beginning the work.

7.3.2 Participatory and active citizenship

(11) *The Sub-committee for Education proposes* that the spread and establishment of such means of participation and influence that have already been developed and found effective be promoted in educational organizations. Similarly, it proposes that new

means of participation and influence be developed, for example, through developmental research.

The Sub-committee for Education believes that the following measures are needed:

- Information shall be gathered on *the different ways to enhance participation and empowerment in day-care centres, schools and educational institutions and on the enhancement of the well-being of students in school*. Information on the functionality of different solutions and practices shall be disseminated. Information on good practices in student bodies and parental organizations shall be passed on. Resources shall be reserved for gathering experiences, further developing practices and distributing ideas. Developmental research shall be supported.
- *Developing collaboration among educational organizations and NGOs* shall be recommended to the providers of education. The opportunities for NGOs to present both their operating practices and their role in civil society to day-care centres, schools and educational institutions and other organizations shall be supported.
- Experiences shall be gathered on how day-care centres, schools and educational institutions have been considered in *local agenda work*. The examples shall be collected in the National Board of Education web-service for sustainable development.
- Information shall be gathered on supplies acquisition, use of materials and waste management of day-care centres, schools and educational institutions. The goal is to study the supplies acquisition processes of schools, to get a coherent picture of the stream of material and opportunities to influence supplies acquisitions, consumption habits, and the prevention of waste production. Use shall be made of the know-how in existing guidance services for supplies acquisition and the service centre for materials effectiveness, which is currently under consideration. Models shall be built describing the stream of material and the opportunities to influence them. Experiences of integrating the study and monitoring of streams of material in education and in the change of operating culture shall be gathered. *Educational administration, environmental administration and the Association of Finnish Local and Regional Authorities* shall continue the work already started, and everyone shall pass on information of experiences and results by way of their own channels.

7.3.3 Sustainable development programme of action

- (12) *The Sub-committee for Education proposes* that a sustainable development programme of action be drawn up for every educational organization by 2010. It should be part of the action and budget plan and quality assurance. The goal is that 15 per cent of day-care centres, schools and educational institutions will have rece-

ived an external acknowledgement or certificate for their sustainable development work by 2014.

The Sub-committee for Education believes that the following measures are needed:

- Day-care centres, schools and educational institutions shall be supported in the implementation of programmes of action and quality and environment systems for sustainable development through *in-service training* and by marketing *support material*.
- Negotiations shall be started between the Ministry of Education, Ministry of the Environment and NGOs on the maintenance and resourcing of the Green Flag and the Environmental certification of schools and educational establishments, on information dissemination and the in-service training of teachers. The *Environmental certification of schools and educational establishments* shall be expanded to cover also the social and cultural dimensions of sustainable development.
- *The Ministries of Education, the Environment, and Social Affairs and Health, the National Research and Development Centre for Welfare and Health (Stakes), and the Association of Finnish Local and Regional Authorities* shall begin studying savings, effects on health and other *positive effects* that can be achieved through systematically focusing on sustainability.
- *Strategy work at the municipal level*, increasing the effectiveness of cross-sector collaboration and supporting day-care centres, schools and educational institutions in promoting sustainable development shall be supported.

8 Actions and responsibilities in starting follow-up work and evaluation

(13) *The Sub-committee for Education proposes* that collaboration be established to assess how the actions proposed for follow-up work, data collection, assessment and feedback systems are implemented, and what impacts the implemented actions have.

The Sub-committee for Education believes that the following measures are needed:

- *The Ministry of Education/NBE, the Ministry of Social Affairs and Health, the Ministry of the Environment, and the Association of Finnish Local and Regional Authorities shall start cooperating in the follow-up work and evaluation of the strategy for education and training for sustainable development. Development of indicators shall be continued. The Ministry of Education/National Board of Education, the Ministry of Social Affairs and Health, and the Ministry of the Environment shall negotiate with assessors and universities on the assessment of the effectiveness of education and training for sustainable development, aimed at diverse assessment projects.*
- *Regional development centres, day-care centres, schools and educational institutions shall be supported in expanding the assessment of their own work to cover the implementation of different dimensions of sustainable development.*

(14) *The Sub-committee for Education proposes* that learning results be assessed in the middle of the programme period.

The Sub-committee for Education believes that the following measures are needed:

- *The Finnish National Board of Education shall make a nation-wide assessment of learning results and implementation of sustainable development in instruction, cross-curricular cooperation, the operational culture of schools and partnerships with external partners in the middle of the programme period.*

Appendix 1

Finnish National Commission on Sustainable Development: Appointment of the Sub-committee for Education

Ympäristöministeriö
ympäristönsuojeluosasto

ASETTAMISPÄÄTÖS

YM045:02/2002

25.5.2004

Kestävän kehityksen toimikunnan koulutusjaosto

Asettaminen

Ympäristöministeriön ympäristönsuojeluosasto on tänään asettanut Suomen kestävän kehityksen toimikunnan koulutusjaoston.

Toimikausi

25.5.2004 - 31.12.2007

Tausta

Koulutuksella on kestävän kehityksen edistämässä tärkeä, yhteiskuntien eri toimintasektorit läpäisevä rooli, ja sen tavoitteena on lisätä kansalaisten tietoisuutta kestävän kehityksen merkityksestä ja sen sisällöstä. Koulutuksella voidaan edistää ihmisten ammatillisia valmiuksia ottaa huomioon kestävän kehityksen näkökohdat ja lisäksi koulutus tuottaa erikoisasantuntijoita kestävän kehityksen tehtäviin. Johannesburgin huippukokouksen mukaan on edistettävä kestävän kehityksen koulutusta, joka perustuu kokonaisvaltaiseen näkemykseen taloudellisesta, sosiaalisesta sekä ympäristön huomioon ottavasta kehityksestä. Tänä vuonna aihe on erityisen ajankohtainen, koska YK:n yleiskokous päättää Koulutuksen ja kestävän kehityksen vuosikymmenen toimintasuunnitelmasta vuoden 2004 syksyllä.

Tavoitteet

Koulutusjaosto edistää kestävän kehityksen koulutusta ja kasvatusta. Jaosto pohtii myös kestävän kehityksen koulutuksen ja kasvatuksen resurssien kehittämistä ja toimijoiden vastuunjaon selkeyttämistä.

Tehtävä

Koulutusjaosto kartoittaa kestävän kehityksen edistymistä koulusektorilla ja osallistuu YK:n kestävää kehitystä edistävän koulutuksen vuosikymmenen kansalliseen seurantaan. Jaosto osallistuu kestävän kehityksen toimikunnan työohjelman teemojen valmisteluun erityisesti kestävän kehityksen koulutuksen ja kasvatuksen osalta ja työstää työohjelmaan myös erillisen teeman kestävän kehityksen koulutuksesta ja kasvatuksesta.

Organisointi

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Annika Lindblom, ylitarkastaja, ympäristöministeriö
Sihteri Erja Vitikka, suunnittelija, Opetushallitus

Jaoston puheenjohtajan ja sihteerin tehtävät hoidetaan virkatyönä.

Jaosto voi kutsua asiantuntijajäsenikseen toimintansa kannalta tärkeitä henkilöitä.

Kustannukset ja rahoitus

Opetushallitus vastaa jaoston kokousten järjestämiskuluista. Jäsenten taustatahot vastaavat jaoston toimintaan osallistumiseen liittyvistä kuluistaan.

pääministeri
kestävän kehityksen toimikunnan
puheenjohtaja

Matti Vanhanen

ympäristöneuvos
kestävän kehityksen toimikunnan
pääsihteri
ympäristöministeriö

Sauli Rouhinen

LIITTEET

Opetusministeriön esitys (15.3.2004, diaarinumero 16/400/2004 korjattu versio) ja ympäristöministeriön esitys (16.3.2004) Suomen kestävän kehityksen toimikunnalle koulutusjaoston perustamiseksi toimikuntaan.

JAKELU

koulutusjaoston puheenjohtaja, varapuheenjohtaja, sihteeri, jäsenet ja varajäsenet

TIEDOKSI

Suomen kestävän kehityksen toimikunta ja verkkosihteeristö

Appendix 2

Promotion of Sustainable Development in Education

		Description	
Publisher Ministry of Education		Date of publication 15.2.2006	
Authors (If a committee: name of organ, chair, secretary) Chair: Monica Melén-Paaso, Ministry of Education Secretaries: Jukka Haapamäki and Sanna Halinen, Ministry of Education		Type of publication Reports of the Ministry of Education, Finland	
		Contracted by Ministry of Education	
		Committee appointed on 12.3.2002	Dnro 18/043/2002
Name of publication Sustainable development in education; Implementation of Baltic 21E programme and Finnish strategy for the Decade of Education for Sustainable Development (2005–2014)			
Parts Memorandum + appendices			
Abstract The plan for piloting the Baltic21E programme in Finland, devised by a Ministry of Education committee (Opetusministeriön työryhmien muistioita 36:2002), was implemented from 2002 to 2005. This second report of the committee (2006) combines (1) the Finnish Baltic21E action plan and the plan for implementation of sustainable development in education and research according to the national Development Plan for Education and Research with (2) the Finnish strategy for the Decade of Education for Sustainable Development (DESD). The report begins with a description of the pilot phase 2002–2005, drawing on the experiences and tacit knowledge gained. Chapters 1–8 report and assess the pilot implementation of the national Baltic21E programme and Chapter 9 presents the vision and strategic lines for ESD in the education system, which were informed by national education policy documents and policy, Baltic21E, the ESD Strategy of the United Nations Economic Commission for Europe (UNECE), and the University Charter for Sustainable Development (Copernicus Charter). The committee puts forward proposals for the implementation of the strategy and action lines in general, liberal adult, vocational, polytechnic and university education and in R&D. The committee members were representatives of the Ministry of Education and the ESD coordinators of the different education sectors. As sectoral experts, the coordinators were responsible for the planning and coordination of the national pilot and the conclusions drawn from it. Thus the signatories of this report have largely influenced its content. The vision for the Finnish education system is that all individuals can contribute to sustainable development which satisfies the needs of today's populations without jeopardizing the possibilities of future generations to satisfy theirs. The promotion of ESD is founded in a holistic view of development which addresses the ecologic, economic, social and cultural dimensions. Finnish DESD policy comprises the following elements: (1) the promotion of SD (incl. sustainable consumption and production) in education at all levels; (2) institutional commitment at policy, steering and practical levels; (3) ethical and integrated approach: all activities address the ecologic, economic, social and cultural considerations as mutually supporting dimensions; (4) integration: the SD outlook is included in all activities; (5) staff development training; (6) interdisciplinarity; (7) dissemination of information; (8) increased networking and other cooperation; (9) participation: empowerment of citizens; (10) research, postgraduate and continuing education programmes; and (11) the utilisation of innovation. The committee proposes that a follow-up group be set up to monitor and assess the implementation and organise national reporting. The mode of reporting proposed by the Committee (Chapter 10) can also be used to monitor the national implementation of the international Baltic21E programme and the UNECE ESD strategy. The promotion of ESD is taken into account in the core funding of the different education sectors. The promotion of SD is also considered in the Ministry's performance management procedure.			
Other information			
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