

Economic Commission for Europe

Committee on Environmental Policy

United Nations Economic Commission for Europe Steering Committee on Education for Sustainable Development

Sixth meeting

Geneva, 7 and 8 April 2011

Item 4 of the provisional agenda

Progress by UNECE member States in the implementation of the Strategy

Information Paper No. 2

Proposed topics for reporting on the progress in the implementation of the UNECE Strategy for Education for Sustainable Development

Note by the Secretariat

1. At the sixth Steering Committee meeting, member States are invited under agenda item 4 to report on their activities related to the implementation of the Strategy since the Committee's last meeting.
2. The reporting of countries on the progress achieved in the implementation of the Strategy offers a valuable opportunity to learn from each other. In order to fully take advantage of this opportunity, the member states are invited to share in particular information on topics which are relevant for a large number of member States. To this end, the following widely relevant topics were identified and member States are kindly asked to report especially on activities they have implemented with regard to:

(i) curriculum revision/adaptation;

Canada is a federation of ten provinces and three territories. There is no ministry or department of education at the federal level and the Government of Canada as a federal and national government has no authority over education policy or direction within provincial jurisdictions. The federal government shares responsibility with First Nations for the provision of education to children ordinarily resident on reserve and attending provincial, federal, or band-operated schools. First Nations children living off reserve are educated in the public elementary and secondary schools in their cities, towns, and communities, with the provinces and territories providing the majority of educational services for Aboriginal students. The provincial and territorial legislatures have developed their own educational structures and institutions, creating 13 education systems with many similarities and some differences.

Responsibility for education is usually exercised through one or more departments or ministries responsible for education. At the pan-Canadian level, the Council of Ministers of Education, Canada (CMEC) provides a forum for education and advanced education ministers to discuss matters of common concern, explore ways to cooperate, share information, and coordinate international education activities and representation

The following is a brief overview of some of the jurisdictional initiatives taking place in the area of curriculum revision/adaptation.

British Columbia

- In BC, most of the environmental and outdoor education related curriculum is integrated throughout the subject areas, and most notably Sciences, Social Studies and Physical Education (in the case of Outdoor Education). BC has an Environmental Guide and Curriculum Maps to assist teachers in making connections: http://www.bced.gov.bc.ca/environment_ed/ . BC has developed a framework to assist teachers in developing their own Sustainability module or course: http://www.bced.gov.bc.ca/environment_ed/ as well as a best practices guide: <http://www.bced.gov.bc.ca/greenschools/pdfs/sustbestpractices.pdf> Please note none of these documents are prescribed. In terms of non-Ministry curricula, there are a number of organizations that support Environmental Education and Outdoor Education and also link to BC Ministry of Education Learning Outcomes. Some of these organizations can be found on our website: <http://www.bced.gov.bc.ca/greenschools/> .
- BC Ministry of Education offers two courses with sustainability and social justice as a focus. Sustainable Resources 11 and 12 (2008) replaces our former Agriculture and Forestry curricula. Both include a survey of all major BC resources through a sustainability lens: http://www.bced.gov.bc.ca/irp/course.php?lang=en&subject=Sciences&course=Sustainable_Resources_11_and_12&year=2008. Social Justice 12 is a new course (2008) designed to raise students' awareness of social injustice, to enable them to analyse situations from a social justice perspective, and to provide them with knowledge, skills, and an ethical framework to advocate for a socially just world: http://www.bced.gov.bc.ca/irp/course.php?lang=en&subject=Social_Studies&course=Social_Justice_12&year=2008

Alberta

- Education for Sustainable Development is reflected in a variety of Alberta programs of study, with the strongest alignment in the sciences and social studies programs of study and in the Natural Resources cluster of the Career and Technology Studies. Alberta Education is currently engaged in revising the standards and guidelines for the development of future curriculum (programs of study, assessments, and learning and teaching resources) in order to support the development of the competencies that students

will need to meet the opportunities and challenges of the future. The Framework for Student Learning: Competencies for Engaged Thinkers and Ethical Citizens with an Entrepreneurial Spirit, a key document that provides direction for future curriculum, identifies several competencies that align with Education for Sustainable Development, including social, cultural, global and environmental responsibility as well as collaboration and leadership.

Manitoba

- Manitoba Education developed a draft instructional support document on ESD learning outcomes correlated with the Manitoba Curriculum. This document identifies the learning outcomes in the provincial curriculum and other resources that highlight knowledge and skills currently present in ESD. It underlines the values and attitudes implicit in a more holistic approach to ESD. In addition, the document has a take-action component and an evaluation component to assess if the action component truly impacts behaviour – changing it from unsustainable to sustainable practices. The ESD Learning outcomes can be found at <http://www.edu.gov.mb.ca/k12/esd/correlations/charts/index.html>
- Manitoba Education has developed a new a new Grade 12 social studies course, *Global Issues: Citizenship and Sustainability*, with a strong emphasis on sustainability and ecological literacy. This course is based on the principles of active democratic citizenship, ecological literacy, critical media literacy, and ethical decision-making, and consolidates learning across the disciplines to empower students as agents of change for a sustainable and equitable future. A component of the course is the planning and implementation of a community-based action-research project. The materials are available at: http://www.edu.gov.mb.ca/k12/cur/socstud/global_issues/index.html

Ontario

- Ontario's Environmental Education Scope and Sequence documents were updated. These resources have been prepared to assist teachers in bringing environmental education into the classroom in each subject/discipline area. They identify both the expectations that are connected explicitly with aspects of environmental education, and those that can provide opportunities to make connection to environmental topics or issues in various ways. <http://www.edu.gov.on.ca/eng/curriculum/elementary/environ18curr.pdf>
<http://www.edu.gov.on.ca/eng/curriculum/secondary/environ9to12curr.pdf>

Québec

- Le ministère de l'Éducation, du Loisir et du Sport is developing a support document for teachers to help them integrate sustainable development into their classroom. The document present highlights of the legal components of sustainable development in the province and exposes teachers to the concepts of sustainable development. The document

also presents the goals of ESD and provides some examples of learning evaluation situation in relation to the disciplinary programs.

New Brunswick

- Education for Sustainable Development (ESD) is reflected in many New Brunswick (NB) curricula, most clearly aligning with Science, Technology, Society and the Environment (STSE) outcomes in science curricula. NB Education is currently reviewing K-10 curricular outcomes in science and considering ways to more effectively embed ESD perspectives.
- The revised Grade 12 Environmental Science course, to be implemented September 2012, supports a sustainable development perspective. Students will explore the interconnectedness of natural ecosystems and human dependence and impact on these systems. They will develop an understanding of the importance of considering environmental, social, cultural and economic aspects of an issue in finding effective solutions.

Prince Edward Island

- The grade 12 revised academic environmental science course was implemented province-wide in September 2011. All aspects of the course explore the interdependencies of ecological, societal, and economic systems required for sustainable development.

(ii) teacher professional development (in-service);

British Columbia

- In British Columbia, much of the in-service professional development is delivered through the BC provincial teachers' federation, the Environmental Educator's Provincial Specialists' Association as well as related non-profit organizations.

Manitoba

- Manitoba continues to provide ESD workshops for teachers. ESD training for senior level officials of schools and school divisions on integrating sustainable development into all aspects of the K-12 education system is provided through the Sustainability and Education Academy (SEdA).

Ontario

- Ontario offered elementary and secondary teacher professional development on environmental education in the summer of 2011 through the Ontario Teachers Federation and the Formation pour l'apprentissage des élèves (FARE). French-language workshops will also be offered in the summer of 2012. The Going Green – Learning Goes Outdoors environmental education workshop provides opportunities for teachers to infuse environmental education into all subject and curriculum areas with a focus on teaching in the outdoors.

Prince Edward Island

- In July 2010, a three day conference was held at University of Prince Edward Island for science educators from Atlantic Canada. The goals of the conference were to promote ESD and to provide teachers with learning and teaching opportunities related to ESD. Educators participated in formal presentations, field trips, and interactive workshops centered around education for sustainable development and sustainability in general.

Newfoundland

- Newfoundland is providing a series of professional learning opportunities to interested teachers to introduce them to the concepts of ESD. The intent is to create capacity to engage in ad hoc creation of supplemental curriculum materials that will support teachers' integration of ESD into their curricula.

(iii) development of learning resources;

Council for Ministers of Education Canada (CMEC)

- CMEC Education for Sustainable Development Working Group contracted Learning for a Sustainable Future to develop a draft toolkit and PowerPoint on Education for Sustainable Development which could be adapted and used by each jurisdiction. The purpose of the tool kit is to assist jurisdictions with building ESD capacity in educators.

Manitoba

- Manitoba Education is currently conducting a survey designed to gather information on Education for Sustainable Development (ESD) in technical and vocational institutions in Manitoba. Information collected in the survey will be used to produce a report, in order to assess what has been done to mainstream ESD into technical/vocational education in Manitoba. The information collected will be used in the following ways:

- As a directory of best practices that can be used to replicate or develop new sustainable development initiatives within TVET.
- As a resource to support curriculum.
- To prepare technical/vocational students for “green jobs”. “Green jobs” include not only environmental technologies, but also jobs in which environmental issues are taken into consideration (e.g., the building trades and new transportation technologies)

Learning for a Sustainable Future

- In the spring of 2012, Learning for a Sustainable Future and Deloitte are hosting a series of Roundtable discussions that will bring together over 100 senior education, business and civil society leaders in four cities across Canada. These Roundtables will focus on responding to the questions:
 - What do children and youth need to know, do, and value by the time they leave school in order to ensure they are responsible, active, and contributing citizens?
 - How can formal education be reoriented to meet these goals?

The results of these discussions will generate a Discussion Paper advising on steps that must be taken to ensure students are prepared to be responsible citizens and future leaders.

(iii) developing a whole school approach;

Council for Ministers of Education Canada (CMEC)

- CMEC ESDWG is encouraging a whole school approach to ESD and has included actions in this regards within the CMEC document, Pan Canadian ESD Framework Information Sharing and Collaboration.

British Columbia

- British Columbia supports a whole school approach to sustainability education, including students, teachers and the community, to sustainability education and has outlined it in their Framework: http://www.bced.gov.bc.ca/greenschools/sustainability_ed.htm. BC was the first jurisdiction in North America to require that all public sector organizations, including all 60 school districts, become carbon neutral. Each of the 60 school districts signed the Carbon Action Charter which acknowledges the long term consequences of fossil fuel use and commitment to reduce carbon emissions. Every year, each of the 60 school districts must complete a Carbon Neutral Action Report, reporting on their total carbon emissions, and describing the actions they are taking to reduce their emissions. To achieve carbon neutrality, districts can reduce their emissions and buy offsets from the Pacific Carbon Trust to achieve net zero emissions.

(http://www.livesmartbc.ca/government/carbon_neutral/school_districts.html)

Many of the school districts integrate infrastructure changes with education programming to increase awareness, and enact long term behavior change. The BC Ministry of Education has provided a Best Practices Guide to support teachers and other leaders in behavior change in their schools: <http://www.bced.gov.bc.ca/greenschools/pdfs/sustbestpractices.pdf>

Manitoba

- Manitoba is encouraging every school to have a sustainable school plan by 2015. To support this goal, Manitoba Education in partnership with the International Institute for Sustainable Development created the Manitoba Sustainable Schools Guide (http://www.edu.gov.mb.ca/k12/esd/pdfs/sustainable_guide.pdf). The guide invites schools to take a whole-school approach to sustainability, by exploring sustainability through curriculum, place based education, improvements in school operations and facilities, and associated social and financial issues. The vision of the Guide is for all schools and their communities in Manitoba to be sustainable.
- Manitoba has recently established an ESD Leadership Council comprised of educational and governmental leaders to advise/assist in the development and implementation of a 3-5 years ESD Action Plan for the province.
- The Manitoba Association of School Superintendents (MASS) and Manitoba Education are collaborating on a conference called Sustainability: Educating for ACTion for superintendents, trustees, principals, teachers, Manitoba Education personnel, students, and members of the wider community. This conference is intended to develop understanding of the cultural, environmental, and socio-economic challenges of educating for sustainability and is rooted in the whole school approach to sustainability. The conference will take place on November 15-16, 2012, and has confirmed several world-class speakers: Thomas Homer-Dixon, Sheila Watt-Cloutier, Richard Louv, Stephanie Pace Marshall, Annie Leonard, Tim Jackson, Thomas King, Gwynne Dyer, and Leith Sharp. A student forum of some 90 high school students will also be part of the divisional teams, and students will participate for much of the time in sessions designed especially for them.

Ontario

- Ontario EcoSchools, an ENGO that supports boards and schools as they implement Ontario's environmental education policy framework, had 1518 certified EcoSchools in 44 English and French-language school boards in the 2011-12 school year. Certified EcoSchools must demonstrate that they have developed both ecological literacy and environmental practices to become environmentally responsible citizens.

(v) teacher training (pre-service);

Council for Ministers of Education Canada (CMEC)

- A survey of ESD in Canadian Faculties of Education was commissioned by the CMEC Education for Sustainable Development Working Group (CMEC ESDWG), in partnership with the International Institute for Sustainable Development (IISD) and Learning for a Sustainable Future (LSF). This exploratory study of Canadian Faculties of Education should provide a better understanding of how ESD is being incorporated into pre-service programs, research, and other activities. The goals of this study were to:
 - develop a better understanding of how ESD is expressed and taught in Faculties of Education,
 - to identify gaps and opportunities for strengthening ESD-related teacher training, and
 - to propose suggestions for moving forward.

The study presents six key findings and seven areas for further consideration. The full report will be released in May 2012 on the Canadian Council for Ministers of Education, Canada's Website at <http://www.cmec.ca/en/>

- A panel discussion is planned for the annual conference of the Canadian Society for Studies in Education (CSSE) to be held in Waterloo on May 30, 2012 that will explore issues related to "Education for a Sustainable Future". This is a follow up to a recent survey by the Council of Ministers of Education, Canada (CMEC) that investigated how teacher education faculties are integrating ESD into their programs. This panel discussion will review the issues and curriculum innovations necessary for this to occur. The panel discussion was a reaction to two related events. First, an October, 2011 meeting of ACDE, where Carolee Buckler presented the results of the CMEC Faculty of Education survey on ESD. Second, a presentation that Len Rivard made at WADE on the work of the UNECE Expert Group on competences in ESD. ACDE has developed national accords on a number of issues: initial teacher education, Aboriginal education, educational research, graduate education. Len Rivard suggested that ESD would be a relevant and timely topic for another accord.

British Columbia

- In British Columbia, there are nine universities that offer teacher education programs in BC, many of which offer specific environmental or outdoor education strands.

Manitoba

- A committee made up of Manitoba Faculties of Education representatives was struck in the fall of 2010 and met several times over the course of a year to develop a list of suggested actions for reorienting teacher education in the faculties of education in Manitoba to address sustainability. The actions are organized under six headings: capacity building; policy; curriculum; administrative; research; and partnerships. One suggested action for policy is as follows: Manitoba Education will consult with the Deans of Education, the Manitoba

Teachers' Society, the Manitoba First Nations Education Resource Centre, and the Council on Post-Secondary Education to explore ways in which teacher certification and accreditation standards could align with education for sustainable development. The Deans of Education and Manitoba Education are continuing to meet to discuss implementation of the suggested actions.

(vi) ESD national action plan development;

- Canada does not have an ESD National Action Plan, instead we have the following in place:
 - Education for Sustainable Development (ESD) is one of eight key activity areas in CMEC's Learn Canada 2020 Framework.
 - In June 2008, ACDME approved the establishment of a working group to develop a Pan-Canadian ESD Framework for Collaboration and Action.
 - The CMEC ESD Pan Canadian Framework for Collaboration and Action (now called Framework for Information Sharing and Collaboration) was approved at the 96th ACDME meeting and ratified by ministers at the 97th CMEC meeting in September 2010.
 - CMEC ESDWG is in the implementation phase of the ESD Pan Canadian Framework for Information Sharing and Collaboration.

(vii) coordination at the international and national/State levels.

- Canada recently supported at the Education Conference of the 36th UNESCO General Conference in Paris, France. Canada's message at UNESCO acknowledges the following:
 - "the importance of sustainable development and the culture of peace and non-violence."
 - "the continued support to properly complete the work of the United Nations Decade for Education for Sustainable Development. "
 - "We have noted the changes regarding the Education for Sustainable Development intersectoral platform, Climate Change Education. We would appreciate some clarification on the implications of this change." (Canada's intervention to the UNESCO DRAFT Programme and Budget, Education Commission at the 36th UNESCO General Conference from November 1 to 3, Paris, France).
- *The Learning for the Future: Competences in Education for Sustainable Development* has been shared with the Council Of Ministers of Education, Canada ESD Working Group. Deputy Minister, Gerald Farthing asked jurisdictions to consider how they might utilize and adapt the document for their jurisdictional use.

- On a regional level, Manitoba is in the process of developing a comprehensive multi-year environmental strategy which will include several ESD actions in the area of formal education, training and awareness.
- What remains a challenge in Canada is the implementation of ESD on a Pan Canadian systemic level.

3. Given the limited time available, each of the countries will have up to three minutes for interventions from the floor.

4. Countries moreover are invited to submit their intervention in written form to the UNECE Secretariat (esd@unece.org) in order to share their experiences also online through the UNECE webpage on ESD.