

## Education for Sustainable Development in Secondary Education of the Flemish Community: Challenges and Perspectives

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#### **Abstract**

Environmental Education is one of the cross-curricular themes, introduced in the mid 1990s in the curriculum of Flemish secondary education (12-18 yr). Both the Brundtland report and the ENSI philosophy inspired the development of the objectives for EE. A strong partnership exists between the departments of education and the environment of the Flemish Ministry and the provincial authorities, which resulted in the project 'MOS', an environmental management system for primary and secondary schools. Besides environmental objectives, the pedagogical objectives of the project are strongly emphasised. The UN Decade of Education for Sustainable Development provides a strong stimulus to link Environmental Education to the other cross-curricular themes, Citizenship and Health Education and to include the 'MOS'-project into the broader framework of Education for Sustainable Development.

As a consequence of the reform of the Belgian State in 1989, the three communities (Flemish, French speaking and the German speaking) became autonomous regarding the organisation of their education systems.

In order to establish its own quality monitoring system for compulsory education, the Flemish Community has chosen the so-called "Quality triangle", supported by three pillars:

- the Department for Educational Development (DED¹) within the Flemish Ministry
  who formulates proposals regarding developmental and final objectives (this means
  formulating proposals for the core curricula for nursery, primary, secondary and
  adult education and "basic competences" for starting teachers);
- the educational inspectorate, who supervises if the schools fulfil their social roles and if public money is used by schools in a sound way; and
- the pedagogic counselling services, who promote educational quality and give support to teachers and schools in order to realise the specific pedagogic projects of the schools.

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# Cross-curricular Themes in the Core Curriculum of Flemish Secondary Education

As there are no standardized tests for pupils in the Flemish educational system, it was decided that final objectives, developed by the DED, should guarantee the transparency and the quality level of education in nursery and compulsory education.

The curriculum for secondary education is largely based on traditional subjects, but in order not to lose important educational goals with a broad social relevance and which often cross the borderline between disciplines, cross-curricular themes were introduced, each containing a number of cross-curricular objectives. This so-called new social education—also often called adjectival educations—offers the opportunity to give social issues a more prominent place in the curriculum (Dufour in Huckle, 2005) especially where this aspect is often "forgotten", such as in science subjects.

In particular, the final objectives of environmental education and citizenship education offer good opportunities for schools to work on education for sustainable development (ESD), but with some creative thinking also other educations can be easily integrated.

Schools decide autonomously about the organisation of the cross-curricular themes: they can be implemented through an allocation process, where teachers take the responsibility to integrate one or more themes in their subject. For example, environmental education may be integrated in geography, health education in Biology, citizenship education in History, etc. Sometimes the starting point for the implementation of the cross-curricular themes is a central theme within a long-term school project (e.g. ENERGON, an project on energy saving). In these cases, several subjects contribute to the same cross-curricular theme. In the case of the ENERGON project, several cross-curricular themes are involved (environmental education, citizenship education, technological education) and several subjects (Physics, Geography, Biology, Arts) contribute (Nerinckx, 2005). Finally, the theme can also be considered as a whole school project to which not only subjects contribute, but also other aspects of school life. This model requires effective systems of communication, cooperation and planning (CIDREE, 1998).

Because of the strong variation in target groups and demographic features, the cross-curricular themes require a strong contextual "translation". Therefore, and in accordance with the position of several authors (a.o. Robottom, 2000), most objectives for the cross-curricular themes were not formulated on a very concrete level.

### **Environmental Education: a Good Starting Point for ESD**

In all stages of secondary education, environmental education is represented in the curriculum as a cross-curricular theme (cf. Table 1 for an overview of the crosscurricular themes per stage).

The Brundtland Report (WCED, 1987) was very inspiring for the development of the final objectives of environmental education for all levels of Flemish secondary education. By the same time of the publication of the Brundtland report, ENSI started as a new government based network under the auspices of the OECD-CERI. The network supports educational developments that promote environmental understanding, active approaches to teaching and learning, and citizenship education. The Flemish Community has been very prominently represented in the ENSI network since the foundation of the organisation. This active membership also strongly influenced the formulation of knowledge and competencies of the Flemish objectives of environmental education.

1 <sup>st</sup> stage	2 <sup>nd</sup> stage	3 <sup>rd</sup> stage
(12-14 year)	(14-16 year)	(16-18 year)
<ul> <li>learning how to learn</li> <li>social skills</li> <li>health education</li> <li>environmental education</li> <li>citizenship education</li> </ul>	<ul> <li>learning how to learn</li> <li>social skills</li> <li>health education</li> <li>environmental education</li> <li>citizenship education</li> <li>artistic education</li> <li>technological education (only for general education)</li> </ul>	<ul> <li>learning how to learn</li> <li>social skills</li> <li>health education</li> <li>environmental education</li> <li>citizenship education</li> <li>artistic education</li> <li>technological education (only for general education)</li> </ul>

TABLE 1: Cross-curricular themes in the Flemish secondary education

The rationale proposed at the time of the introduction of the new curriculum, is summarized below. For the first stage of secondary education, the final objectives are clustered into subthemes, such as: air, water and soil, living beings and their environment, the society and the use of space and waste. In the first stage (12-14 years old) the approach mainly relates to the local context and to themes which relate to the pupils' daily life and experience. The "study" of certain environmental aspects are therefore limited to basic research. The aim of the curriculum developers was not to formulate final objectives that can already be included in the cognitive sphere of specific subjects, but rather as cross-curricular skills and value judgements. The subthematic clustering is a mere illustrative example. Another clustering could be justified as well, for instance with regard to the methodical approach. Hence, the indicated order should be understood only as an indication and the schools have the freedom to rearrange the objectives according to their own pedagogic mission.

In the second stage (14-16 year) of secondary education, the emphasis is put on environmental care, which can reveal itself in the attention for both nature and the environment. The distinctive features of environmental education can be emphasized, not only by linking them to other cross-curricular final objectives, but also by stressing contents, skills and attitudes within the distinct subthemes. By considering the variety in pupils' educational level, the differences in technical and instructional possibilities and depending on current events, the approach to the subthemes may differ from school to school. Nevertheless, the overall goal must be to realise a harmonised approach of people and their environments. Therefore ideally, the choices within and beyond the subthemes should be discussed at school level and supported by a school policy.

Based on their ability to care for their environment and that of others, pupils in the third stage (16-18 year) can become sufficiently involved at school to participate actively in policy and decision making. Young people can participate in nature development, environmental management and spatial policy. Through their education pupils acquire action competence which will enable them to take responsibility in tomorrow's society. Such education is a social learning process. Together with other cross-curricular approaches, it fits in with the global and future-oriented context of young people's living environments.

Nature, environment (in a wide sense) and landscape are dealt with in a holistic context. At the age of 16-18, there is room for a solid scientific basis of knowledge and

skills, and consideration of economic aspects, judicial arguments, cultural indicators and social commitment, aspects which are also strongly emphasized in education for sustainable development. It is clear that from the beginning also the social and economic aspects of EE were stressed in the policy documents regarding the final objectives<sup>2</sup> of the second and third stage of secondary education, both in general and vocational education.

Nevertheless, and only as a consequence of the Johannesburg Summit in 2002 and the UN Decade for ESD, education for sustainable development, has acquired a prominent place in the agenda of discourses within different educational authority boards in Belgium.

# Creating Synergies Between the Departments of Education and the Environment

Since 1997, the Department of the Environment of the Flemish Ministry has offered free guidance to both primary and secondary schools which want to set up a system of environmental care (MOS³). The Department of Education is involved through the membership of the DED, the educational inspectorate and the different educational organisations in the steering committee. Besides the Flemish Ministry, also provincial authorities are involved in developing and implementing the concept and in financially supporting the project.

The department of the environment develops materials and tools that can be used by schools to support their actions. At the end of each school year logos are being awarded to schools which apply and submit a "portfolio" which illustrates their efforts regarding environmental care in the school environment. The criteria which are used to award the logos relate to planning and vision building, the structural embedding of caring for the environment in the school culture, the degree of participation by as many as possible school actors, the number of environmental issues the school is working on, the extent of internal and external communication of their actions, and the amount of environmental and educational gains. All schools, who want to enter the project, must sign the "environmental policy declaration". Today about 60% of all secondary schools participate in the project and about 6% of the Flemish secondary schools have been awarded the highest level "logo 3". A detailed description of the Flemish MOS project can be found in the ENSI publication on Eco-schools (Sleurs, 2005).

### Learning for Sustainable Development: a New Challenge

The UN Decade for Education for Sustainable Development (UNDESD) turns out to be a strong sign for both the Department of Education and the Department of the Environment to integrate the concept of sustainable development in their school programmes. The UNECE<sup>4</sup> Strategy for Education for Sustainable Development strongly emphasizes integrating issues of SD in national curricula at all levels. This is not surprising, as experience shows that the inclusion of ESD in national curricula seems to promote change on the institutional level (Ferreira, Ryan & Tilbury, 2006).

A review of the final objectives of Flemish secondary education shows that at the curriculum level, the concept of sustainable development is already explicitly present, particularly in the second and third stage of secondary education. Final objectives that explicitly relate to sustainable development can be found in subjects such as Biology and Geography and in the cross-curricular themes of environmental education and citizenship education. However, schools have only just started to build up experience regarding the cross curricular themes, and now they are confronted again with the new challenge of ESD. Therefore, from a strategic point of view, it was felt important by curriculum developers in the field not to give the impression to schools and teachers

to overload them with another extra innovation. On the other hand, schools very often have a long tradition of organising valuable projects which may relate to environmental issues, issues of fair trade, North-South issues, peace education, etc. However, usually these projects are organised in isolation, notwithstanding they often offer good opportunities to connect the environmental, social and economic aspects to the issue.

The Department of Education and the Department of the Environment will recommend schools to review their projects and to put them in the larger context of sustainable development, without imposing any additional cross-curricular or discipline related objectives. For instance, schools working on the theme of "water pollution", receive support about the way they can connect the environmental aspects of the "water pollution problem" to economic and social aspects. The list of key themes in the UNECE Strategy document may be inspiring for schools to find out how they can extend their EE projects (or other education) towards ESD.

Reflecting on the deep causes of sustainability-related problems is seen as a characteristic feature of ESD (a.o. Huckle, 2005). However, this is also the most challenging aspect of ESD and very often there is still a strong instrumentalist view on the way environmental education (and in some cases ESD) is integrated in the subjects or in the school program. Adjectival educations often contain examples of contested concepts, as illustrated by Beck (1996) for citizenship education. Teachers often feel very uncomfortable when it comes to this point which may lead to less commitment (Kerr, 2000). Also text books which occasionally refer to environmental or sustainability issues, very often formulate ready-made solutions, which leave very little space for reflection or critical thinking.

As already mentioned above, schools have the freedom to rearrange the final objectives of the cross-curricular themes in ways that best fit their pedagogic school project or reflect their pedagogic mission. The latter meets the UNECE Strategy recommendation that the educational institute as a whole, including all the school actors, should follow the principles of sustainable development.

As a result of a focus-group meeting with representatives of the MOS steering group and logo 3-schools (both teachers and pupils) in 2002, the schools expressed their desire to extend their environmental projects towards projects which more reflect the concept of sustainable development. They see good opportunities for doing this by integrating the different adjectival educations (Sleurs, 2005).

There is an important role for the NGO's as they often offer very valuable materials for schools and as they support them to organise projects. It is therefore hopeful to see that particularly these organisations are very enthusiastic in seeking for possibilities to reorganise their school projects within the framework of education for sustainable development. However, from recent research (Ferreira et al., 2006) it becomes clear that mere delivery of products for ESD -irrespective of the quality- to schools, results in a rather small impact, and usually reaches only those teachers who have already an interest in ESD. This concern was also expressed by the logo 3 schools at the focus-group meeting: they explicitly mentioned that disseminating teaching and learning materials, which are not directly linked to the curriculum, usually have a "counterproductive" effect. At least some form of consultation with and feedback from the schools or their representative networks is required (Sleurs, 2005).

It is therefore important that a close partnership be developed when new teaching and learning materials for ESD are developed. These partnerships should contain as many stakeholders and actors as possible: educational authorities, NGO's, schools, teachers and other school staff and students/pupils. To this end, an extensive consultation platform has been established within the Flemish Ministry to look for the best possibilities to implement the UNECE Strategy on ESD. However, expectations

must be kept realistic: all actors should receive the opportunity and sufficient time to build a good understanding of sustainable development, as this is also considered an important success factor for the implementation of ESD in compulsory education (Ferreira et al., 2006).

It is not surprising therefore that the UNECE Strategy for ESD allocates a particular role to the initial training and re-training of educators. The Flemish teacher training department of the Catholic School for Higher Education of Leuven, together with the Curriculum division of the Department of Education of the Flemish Ministry initialised the Comenius 2 ENSI project "CSCT" aiming to develop a competence based curriculum for ESD in both initial and in-service teacher training institutes. The partnership contains 15 organisations, most of them teacher training institutes, from 9 different European countries. The project started in 2004 and should be finalized by the end of September 2007. The outputs should help teacher training institutes to organise their curriculum in such a way that ESD will be integrated in the curriculum of the teacher training institutes so that teachers—regardless the level or subject they teach—will acquire the necessary competencies in order to be able to deal with SD issues at the classroom and school level.

One of the most important lessons learnt about educational innovations concerns the failure of top-down implementation (a.o. Ferreira et al., 2006). From the start of the ENSI network the application of action research (AR) has been emphasized for the implementation of curriculum innovations at school level. Therefore, also in the CSCT project teacher competencies with respect to action research will receive special attention as AR will be recommended as a good tool for reforming the traditional school curriculum towards a curriculum that is inspired by the idea of ESD.

### And there is hope ...

ESD is a concept that is gradually becoming integrated in discourses about school curricula in Belgium. However, experience shows that it will take some time before it can be considered mainstream in schools. But it is hopeful to notice that many stakeholders—both authorities and workers in the "field"- react enthusiastically to the proclamation of the UN Decade for ESD, and consider it an opportunity and challenge for their work rather than a threat.

Keywords: education for sustainable development; UN Decade of Education for Sustainable Development.

#### **Endnotes**

- Due to the organisational reform of the Flemish Ministry (1 July 2006), the DED
  has been replaced by the "division of curriculum" which is fully integrated in the
  Department of Education and Formation of the Flemish Ministry.
- 2. The implementation of the cross-curricular themes of the 2<sup>nd</sup> and 3<sup>rd</sup> stage of secondary education started respectively in 2002 and 2004.
- 3. MOS: acronym for "Milieuzorg Op School" (caring for the school environment); in Dutch, the acronym also means "moss".
- 4. UNECE (United Nations Economic Commission for Europe who developed a Strategy for the implementation of the UNDESD and which was adopted during the High-Level Meeting at Vilnius, 17-18 March 2005).

### References

- Beck, J. (1996). Citizenship education: Problems and possibilities. *Curriculum Studies*, 4(3), 349–366
- CIDREE (1998). Across the great divides. Report of the CIDREE Collaborative Project on cross-curricular themes. Dundee: Scottish CCC.
- Dufour, B. (Ed.) (1990). The new social curriculum: A guide to cross-curricular themes. Cambridge: Cambridge University Press.
- Ferreira, J., Ryan, L., & Tilbury, D. (2006). Whole school approaches to sustainability: A review of models of professional development in pre-service teacher education. Canberra: Australian Government Department of the Environment and Heritage and the Australian Research Institute in Education for Sustainability (ARIES).
- Huckle, J. (2005). Education for sustainable development. A briefing paper for the Teacher Trainer Agency. Retrieved June 20, 2006, from http://www.ttrb.ac.uk/attachments/5ecda376-6e78-43bl-a39b-230817b68aa4.doc
- Kerr, D. (2000). Citizenship education: Some lessons from other countries. *Topic*, 24, 1–9.
- Nerinckx, I. (2005). ENERGON: An interdisciplinary school project about the carbon dioxide emission problem. In F. Mogensen & M. Mayer (Eds.), ECO-schools: trends and divergences. A Comparative Study on ECO-school development processes in 13 countries. Vienna: Austrian Federal Ministry of Education, Science and Culture, Dept. V/11c, Environmental Education Affairs.
- Robottom, I. (2000). Environmental education in changing times. In B. Moon, S. Brown & M. Ben-Peretz (Eds.), *Routledge International Companion to Education* (pp. 502–512). London, NY: Routledge.
- Sleurs, W. (2005). Country report Belgium Flemish Community. In F. Mogensen & M. Mayer (Eds.), ECO-schools: trends and divergences. A Comparative Study on ECO-school development processes in 13 countries. Vienna: Austrian Federal Ministry of Education, Science and Culture, Dept. V/11c, Environmental Education Affairs.
- UNECE (2005). UNECE Strategy for Education for Sustainable Development adopted at the High-level meeting. CEP/AC.13/2005/3/Rev.1. Retrieved July, 5, 2006, from http://www.unece.org/env/documents/2005/cep/ac.13/cep.ac.13.2005.3rev.1.e.pdf
- WCED (1987). Our common future. Oxford: Oxford University Press.

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