

# The Beginnings of ENSI

# Development phases of ENSI

- **Phase 1** (1986 to 1988): Innovation exchange activity of OECD/CERI
- **Phase 2** (1989 to 1994): Full scale project of OECD/CERI. Foci: quality criteria, dissemination of research results, in-depth studies in six countries
- **Phase 3** (1995 to 2004): Decentralised Network of OECD/CERI. Foci: Teacher Education, Quality Assessment, Networking and ICT and ECO-Schools.
- **Phase 4** (2005 –): Independent network and since 2009 international non profit organisation

# Initiation of ENSI

Paris 1984: Ministers' Conference (Education Committee): Proposal by the Austrian Minister Moritz to include EE in OECD's educational Programme

Paris 1985: CERI Governing Board's „Forward Planning Exercise“. Project Proposal to link environmental and economic interests: „Ecological sensitivity and dynamic qualities“

Paris, 12/1985: Decision to „go ahead“ as „Innovation Exchange Programme“ by directors Gass (EC) and Papadopoulos (CERI)

Paris, 10/1986: First conference of Country Coordinators

# Logic of the forward planning paper: Linking two seemingly contradictory demands

## ***The promotion of „ecological sensibility“***

...generally associated with a conservationist spirit and hostility towards technological developments

***The promotion of „dynamic qualities“*** such as initiative, commitment, readiness to accept responsibility to shape and structure situations

...generally associated with positive attitudes towards change and technological development

***Linking the two demands:*** Responsible involvement in favour of the environment is *the* breeding ground for the development of creativity, initiative and responsibility.

# Decisions taken in 1985

- *Project Title:* „Environment and School Initiatives“
- *Status:* Innovation Exchange activity for two years
- *Aim:* Identify, support and study environmental initiatives at school level
- *Country responsibility:* Each interested country should nominate a coordinator and be responsible for initiatives
- *CERI responsibility:* International co-ordination (Kathleen Kelley-Lainé)
- *Final conference:* Results to be presented at an international conference in Austria in 1988

# Phase 1: Countries involved

Austria

Belgium

Denmark

Finland

Germany

Italy

Netherlands

Norway

Portugal

Sweden

Switzerland

Observers:

France

Canada

# Environmental sensitivity

Students should be able to develop

- an understanding of complex environmental equilibria,
- a concern for the side effects of human interventions and
- a balanced view of the life and death potential of technology and of the economic and ecological side of many problems.
- individual and collective action to actually improve aspects of the natural social or cultural environment.

# Dynamic qualities

Dynamic qualities develop

- If activities transgress the boundaries of the school and the stable structures of systematic knowledge.
- If students are confronted with ill-structured situations which have to be structured by them.
- If activities refer to issues where there are potential conflicts of opinion and of vested interests.
- If activities of students and teachers involve action and reflection and go beyond the acquisition of information.

# Four dimension of the two guiding principles

Students should

- experience the environment as a sphere of personal experience and develop an emotional relationship to their environment.
- examine the environment as a subject of interdisciplinary learning and research and to produce „local knowledge“.
- shape the environment as a sphere of socially important action
- be involved in decision making regarding problem definition, process and monitoring their work.

## **Production of local knowledge, i.e. knowledge of specific conditions of the pupils' environment.**

- The knowledge produced is not a reconstruction of existing knowledge but is potentially "**new**". It may provide information on issues which was not available so far.
- The knowledge is **specific**, generated in specific contexts. It is potentially valid in this context but not necessarily in other contexts.
- The knowledge is potentially **useful for a specific audience**. It may increase its ability to understand situations and to cope with demands.
- For the students the generation of local knowledge implies **an integration of experience-based judgement with available systematic knowledge**.

# Means of direct involvement of students

- Activities to **inform** other people. In many cases research activities to gather and analyse evidence (i.e. local knowledge generation) are a necessary prerequisite for this purpose.
- Activities to **convince** others of the usefulness and feasibility of certain changes or to **exert pressure** (e.g. by personal example, by petitions, public hearings, letters, by involving the local press etc.).
- **Hands-on construction** of alternative environments (by buying land for biotopes, developing the ambience at school, reducing waste at school etc.).

# Questions for closer examination

(1985)

- Is a balance of systematic instruction and local initiatives feasible in school?
- What are its organisational and professional implications (e.g. for the role and qualification of teachers?)
- Action - especially if guided by ecological sensibility - may invite conflict. What does this imply for the political status of the school?
- What are the implications of local initiatives for the examination and selection system of the school?
- What kind of use can be made of information technologies to support these initiatives?
- Is there a link possible between initiatives of this kind and the creation of local employment?

## **Developments in society that ask for a redefinition of the tasks of schooling (1)**

- The effects and side effects of human activity become less and less predictable. As a result, decisions have to be taken more and more in the face of conflicting demands and insecurity.
- the enormous 'life potential' of economic and technological development is confronted with a growing 'death potential' creating serious problems for the established decision making mechanisms.
- social complexity and insecurity is increasing and the decision-making capacity of socio-economic systems is decreasing. They enforce a decentralisation of initiative, responsibility and competences from the institutions and traditional powers to the individual citizen. This implies that the individual citizen must increasingly be ready to deal with complexity and to take initiatives.

# **Consequences for the schools**

How are students prepared to cope with contradictory demands, insecurity and plurality of values?

How are they prepared to take initiative and to influence the world they live in, and do this in a responsible way?

# The status quo: traditional modes of schooling

## *Predominance of systematic knowledge:*

High priority: well-established facts enabling schools to maintain close relationship academic knowledge production.

Low priority: open and controversial areas of knowledge and the process of knowledge generation.

## *Specialization:*

Knowledge is compartmentalised in subject matter fields corresponding to the academic disciplines. This facilitates the orientation on academic knowledge structures and disregards complex, real-life situations which cross the disciplinary borders.

## *Transmission-mode of teaching:*

It facilitates the retention of the systematic character of knowledge and its reconstruction by the student. It discourages the generation and reflective handling of knowledge.

## *Prevalence of top-down communication:*

It facilitates the control process for predefined knowledge structures and discourages self-control and cooperation between students (or teachers).

# General aim: Opening the school

- ***Opening in the sense of tapping external resources for teaching and learning.*** Use is made of the wealth of authentic information that is available outside the school doors and that goes far beyond the subject matter content that is systematised in textbooks or that is accessible through the teachers' knowledge.
- ***Opening in the sense of taking initiative to define problems in the environment and to transform values into practical action.*** This notion implies that teachers and students have a right to participate in shaping the environment they live in.
- ***Opening in the sense of responding to concerns of the community*** and offering the schools' intellectual, creative and material potential to interests coming from outside.

# Research areas

(1988)

- Effects of environmental initiatives
  - on student attitudes and learning
  - on the quality of the environment
- Relationship between environmental and economic demands and the role of environmental school initiatives in economic terms
- Meaning of dynamic qualities and their representation in school initiatives
- Status of environmental initiatives in main stream instruction
- Methods of assessment in environmental projects and their consequences

# Central evaluative questions

(1988)

- In what ways do environmental initiatives increase the "significance value" (Tenbruck 1975) of the school for students and what are their spin-offs for main-stream education?
- What are the problems and potential pitfalls of these initiatives and how are they coped with?
- In what ways do they change the balance of static and dynamic elements of school culture?
- In what ways do they effect the status of schools (and teachers) in the community and perhaps in society at large?

# Problems encountered

## (1988)

- The promotion of dynamic qualities is not in line with some prevalent conceptions of instruction. How can the acceptance of student self determination and participation in decisions be improved?
- In the course of initiatives pupils and teachers are sometimes involved in public controversies and conflicts. To what extent are they inevitable, and how can the schools' potential be increased to cope with these conflicts?
- Many project teachers report little understanding for their activities on the part of their colleagues. What are the reasons, and how can these attitudes be changed?
- There is a tendency to push activities of that kind towards the margin of school activities and into the leisure time of pupils and teachers. How can their integration into "normal" instruction be promoted, and how meaningful is their promotion?

**Some challenges and  
theoretical approaches  
emerging in the second  
phase of ENSI**

# Challenges Schools are Facing Today (1994)

- (1) How can schools contribute to a social development in which the *negotiation of rules and norms* becomes important and social responsibilities are no longer accepted as predefined but have to be constructed for specific situations?
- (2) How can schools create social situations, in which young people experience the *continuity of social relationships* and understand that co-operation is better than to instrumentalize others?

- (3) How can young people experience that they are important and that they can *leave constructive traces in society*.
- (4) How can schools provide opportunities to *combine advocacy of knowledge with inquiry* and how can they promote both an appreciative and critical selective stance towards knowledge?
- (5) How can schools prepare students to *cope with decreasing job perspectives and increasing job demands*?

## New types of social relationships emerge between teachers : “Dynamic networks”

***Dynamic networks:*** the autonomous establishment of professional exchange to assist responsible action in the face of complexity and uncertainty.

- They are ***non hierarchical:*** They do not follow predefined routes of (generally top-down) influence.
- They are ***flexible:*** They are limited to specific tasks as defined by the teachers and students

# **Pedagogical dimensions of sustainable development**

**Besides learning of facts, rules and principles:**

- *Focus on complex, real-life unstructured situations which raise controversial issues*
- *Active generation of knowledge by pupils and teachers in the local contexts of action,*
- *Pro-active shaping of the environment,*
- *Focus on interdisciplinary inquiry*
- *Promoting a critical, reflective attitude towards given stocks of knowledge;*

# **Social dimensions of sustainable development**

**Besides authoritative determination of regulations:**

- *Negotiation of binding rules and assigning responsibilities to pupils;*
- *Support of team work and social continuity*
- *Individual und Joint Reflection on the quality of teaching and learning and on life in school*

**Besides detachment from the social, cultural and economic environment**

- *Active construction of external relations in terms of mutuality*

# Technical dimensions of sustainable development

## Initiatives to

- *save Resources*
- *reduce environmental stress*
- *design indoor and outdoor space in an aesthetic and ecologically viable way*
- *promote healthy living conditions*

# Two Rationalities

## ***Technical Rationality***

- ***There are general solutions to practical problems.***
- ***These solutions can be developed outside practical situations (e.g. in academic institutions, technical laboratories or administrative centres).***
- ***The solutions can be transmitted to practitioners (through courses, publications, prescriptions etc.). If correctly applied they are expected to solve the practical problems.***

## ***Reflective Rationality***

- ***Complex practical problems demand specific solutions.***
- ***The solutions cannot be developed outside the context in which the problem arises and in which the practitioner and his actions are defining elements.***
- ***The solutions cannot be generalised to and applied in other situations. However they can be used as hypotheses by other practitioners to be tested and modified in their situations.***