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The Ecologisation of Schools in Austria

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THE ECOLOGISATION OF SCHOOLS IN AUSTRIA

Austria is one of 10 countries involved in the OECD CERI (Centre for Educational Research and Innovation) Environment and School Initiatives (ENSI) project. Begun in 1986, ENSI is one of the first international projects to promote development and research in ambitious, environment-oriented instruction. In Austria, there is an 'Ecologisation of Schools' (ECOLOG) programme which currently involves 22 pilot schools, from primary to secondary technical school level, participating in the ENSI project.

What is meant by the ecologisation of schools?

Condensed to one sentence, ecologisation means shaping human interaction with the environment in an intellectual, material, spatial, social and emotional sense to achieve a lasting/sustainable quality of life for all. This definition clearly shows that ecologisation is not a one-time affair, but an on-going task. Moreover it concerns not only schools, but all institutions within the social fabric. The term environment embraces the natural and technical environment as much as the social and intellectual environment.

What are schools doing if they strive for ecologisation? They launch initiatives at three levels, at the pedagogical, at the social/organisational, and at the technical/economic level.

At the **pedagogical level**, schools aim at creating stimulating and meaningful learning experiences and at involving pupils in ecological ways of thinking, acting, and feeling at school, in their families and communities. This process is characterised by a shift of priorities from the prevalence of learning tasks structured by systematic knowledge to a focus on complex, real-life low-structured situations which raise controversial issues; from an orientation towards individual subjects to interdisciplinary inquiry; from passive learning of facts, rules and principles to the active generation of knowledge by pupils and teachers in the local contexts of action, to a pro-active shaping of the environment, and to promoting a critical, reflective attitude towards given stocks of knowledge; from top-down communication of learning requirements to active participation of pupils in negotiating the conditions of learning, and to promoting individual reflection by pupils about the quality of

their learning. The focus here lies on a dynamic concept of learning according to which pupils do not only acquire knowledge and experiences for the future, but shape their living and working conditions constructively in the present (Elliott 1994, 1998).

At the **social/organisational level**, schools aim at building and cultivating a culture of communication and decision-making and at developing a social climate which is characterised by mutual recognition and respect. This implies a shift of priorities from isolated teachers and pupils towards a team structure and social continuity; from the pre-determination of framework conditions to negotiating binding rules, to assigning responsibilities to pupils; from detachment from the social environment towards active construction of external relations.

At the **technical/economic level**, schools aim at the ecologically sound and economic use of resources. This includes measures to save resources; to reduce waste; to design indoor and outdoor space in an aesthetic and ecologically viable way; and to promote healthy living conditions.

Ecological schools are schools which become active at all three levels. They relate pedagogical, social/organisational and technical/economic initiatives to each other in a constructive way and make the pursuance of these efforts an inherent feature of their educational philosophy. Ecologisation, in this sense, involves awareness and behaviour, social structures and observable as well as quantifiable effects on the quality of the environment. In another sense it is an extended view of education.

What is innovative in the 'Ecologisation of Schools' project?

Its novelty consists, first and foremost, of three long-term, educational-policy developments. At the first level – the individual schools – it is the **step from temporary individual initiatives to ecologically sustainable structures and to a combination of pedagogical, social and technical/economic initiatives**. In this respect, ecologisation can be regarded as an important contribution to school development. Many innovations at school are individual or group initiatives launched by committed teachers, school heads, and pupils, and tied to their motivation and involvement. Most innovations come to an end when commitment falters or when external support is withdrawn. Few innovations actually have a transformative impact on the culture of the institution as a whole.

The ecologisation programme therefore attempts from the very outset:

- to win over a 'critical number' of teachers in a school by persuasion, good examples and open communication;
- to transform passive concern into active involvement and to create the necessary conditions which allow parents and pupils to take part in reflection, in planning and in decision-making processes;
- to set up an organisational structure which ensures the quality and the stability of the ecologisation process;
- to pool existing initiatives, use synergies and embed them in the curriculum;
- to create mutual expectations and traditions with respect to acceptable attitudes and behaviour.

At the second level – that of the educational system – it is the ***step from pilot schools to an inherent feature of the system of education***. This means developing a strategy to spread ecological development processes as widely as possible. Many reform initiatives are burdened by the fact that they are limited to a few, rather privileged schools, particularly because the required investment in terms of training and resources cannot be afforded on a general scale. Therefore, a strategy is needed which stimulates and supports a dynamic development within schools, involving teachers, students, administrators, support staff such as secretaries and caretakers, and parents.

There is probably no topic better suited for developing and testing such a strategy than the ecologisation of schools, for several good reasons:

- Almost all schools have already taken initiatives in this area, not least because they are searching for new forms of meaningful learning.
- Public interest in developments of this kind is large. Ecologically-driven initiatives therefore provide opportunities to establish links with external institutions (e.g. municipal administrations, cultural institutions, the business community etc.).
- Schools which become ecologically active do not only gain status, but gain a certain influence on their environment. They are no longer at the receiving end of social demands only, but also in a position to effectively assert demands towards society.

The development of a sound strategy for the dissemination of initiatives aiming at ecologisation is a pioneering feat whose impact would reach far beyond the specific concern of the ecologisation of schools.

At the third level – competences – it is the step ***from the competences of a minority of teachers and headmasters to an intrinsic professional feature of the teaching profession and of school management***. A survey of environmental education policies in Austria has shown that innovative practice is only rarely generated in teacher training institutions, but almost exclusively in schools. Teacher training has been identified as a weak point in the educational system (House, Eide, Kelley-Lainé, 1994). The second issue within the ecologisation programme will therefore be teacher training. In Austria, e.g., three teacher training institutes and three university departments will be developing and testing viable curricula to prepare students for a teaching practice guided by the educational philosophy of the ecologisation program. These curricula will include, inter alia, the involvement of trainee teachers in ecologisation initiatives as part of their training, and the close co-operation with schools which have taken on a leading role in this field.

Framework for the ecologisation of schools

An appropriate framework is called for if the ecologisation of schools is to become an inherent feature of the educational system. Three factors deserve particular attention in this context: the regional support system, the incentive system, and the obligation of schools to engage in a self-organised development process, combined with self-evaluation.

The regional support system

Building a regional support system is a fundamental task for the coming years. In Austria, three distinct development phases have been envisioned so far:

- The 22 schools involved in the pilot phase (1996-98) will receive direct support and guidance from the ENSI team members. Another 30 schools are loosely associated with the project and receive information about the ongoing activities.
- A larger number of schools will be invited to participate in this movement through a national competition (1998-99). During this phase also a regional support system will be established to support the further extension of the program.

- The third phase will extend the ecologisation programme to a still wider range of schools than those participating in the competition. This phase and other extension phases will then be developed together with the facilitators from the support system. A first medium-term goal is to reach a critical mass of about 15% of all schools by 2005.

From today's viewpoint, the support system will have one major task to fulfil: to organise further education and training and – closely connected to that – to promote the exchange of experiences between schools in order to derive maximum benefit from the pool of competence which is accumulating at the schools.

The schools must become the central agents of the further extension of the movement and must be able to develop specific profiles through their involvement. By mutual communication and support, teachers, pupils, and heads of interested schools should be able to gain experiences with ecologisation processes, without having anything imposed on them. 'Innovations move along personal relationships' (House, 1994).

It is assumed that the development of professional competence in organising communication in order to disseminate innovation will become increasingly important, irrespective of the ecologisation programme. First experiences were gained in the programme 'Teachers reporting from practice', where teachers share their experience on innovative projects with interested colleagues in afternoon events (Piber, 1993); this programme could be further developed into a 'Schools reporting from practice' programme. The elaboration of effective means of stimulation and external support for school innovations will probably become a major area of development for regional educational infrastructures.

The incentive system

Many school-based innovations remain a one-time affair because their benefits are not always immediately discernible, while the disadvantages – which are part and parcel of every innovation – attract ready attention (let alone the fact that criticism tends to be more appreciated than praise, and that innovation is often considered a threat and devaluation of the status quo). These problems are of a general nature and may be overcome by:

- promoting an attitude among teachers which holds them responsible not only for their classroom teaching but also for the further development of their school;

- promoting an attitude which sees innovations as inherent features of any good school and which therefore deserve recognition per se;
- developing a reliable and credible process for evaluating the quality of innovations at schools.

Another reason why ecological initiatives often die away soon, is that schools do not benefit financially from the savings made. In Austria, a system is currently being elaborated according to which savings made in the course of ecologisation initiatives may remain fully or partly at the school (bonus system). The basic problem is how to devise a fair system which neither puts schools which have used their resources sparingly so far at a disadvantage, nor rewards those schools which have wasted their resources in the past.

An interesting and less complex approach to this problem has come up in a Tyrolean community: a secondary general school received an advance grant of ATS 10,000 in recognition of its pledge to use energy resources more sparingly. The actual amount of savings would then be ascertained at the end of the year. Under this concept an advance grant is given in good faith and accounted for later on.

Apart from financial incentives there are other motives that weigh heavier than material considerations. One of the most important motives is recognition by other persons. Even if schools are entitled to keep part of the saved resources the material value may be less important than its symbolic value as an indication of public recognition. Other relevant incentives are:

- the firm belief in making a socially important contribution,
- an opportunity to be able to actively shape conditions of work and life,
- an observable gain in the quality of life.

The demands for accountability and school development

The more autonomy schools enjoy, the more they are accountable to the general public for how they use human and material resources. It is important that schools take on this responsibility themselves and do not wait until they become dependent on external evaluation (Posch, Altrichter, 1997). In Austria, a self-evaluation concept is currently being developed which closely associates evaluation and development and which leaves the individual schools with the main responsibility for quality evaluation

and development. Under this concept, schools will be given an opportunity to credibly present their readiness for innovation and their achievements to the public by way of a school program (Federal Ministry for Education and Cultural Affairs, 1997).

School environmental programs will become mandatory in Austria in the year 2002/2003. The programme on 'Ecologisation of Schools' is intended to provide an opportunity for schools:

- to gain first experiences with linking development and evaluation activities and initiatives to provide credible accounts to the public,
- to prepare themselves for the expected mandatory periodic elaboration of school programmes.

This development process takes place under difficult conditions: schools must cope with new demands on the part of pupils and of society in times of tightening resources. In one respect, however, the overall situation of schools has improved: the scope for individual decision-making has become broader. However, the schools will still have to find ways and means to exploit this scope for the further development of the quality of teaching and of learning, the quality of life in schools, and the quality of the local environment. The ecologisation programme could make a significant contribution to designing, shaping and stabilising these spaces of discretion.

What does ecologisation mean for PEB?

PEB has been pursuing an environmental agenda for much of its 25 year long mandate. With Austria it co-hosted a conference on schools in the environment in the late 1980's, and just last year convened two conferences on the school and the environment in Italy and the UK.

PEB sees the 'Ecologisation of Schools' activity as an opportunity to combine the up until now separate activities of:

- environmental education being lead by the internationally active ENSI initiative;
- learning through school grounds being lead by the increasingly international 'Learning Through Landscapes' initiatives;
- environmentally sustainable school design which is a major thrust of the PEB programme of activities.

These previously disparate activities have all achieved excellent results as separate programmes and initia-

tives. It is now time, however, to combine these efforts into a holistic systematic approach targeting both the policy and the school levels.

It is with this strategy in mind that the three programmes are collaborating in a conference in Linz in October this year. (This will be shortly after an OECD Workshop on Education and Sustainable Consumption, being jointly organised by the Environment Directorate and CERI, with close ENSI involvement, to be held in Paris, 14-15th September 1998.)

Proposed conference

ENSI, PEB and the Austrian Government are hosting a conference on the ecologisation of schools in Linz, Austria from the 3rd to the 7th of October. Further details may be obtained from:

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This article is based on a paper by Peter Posch.