



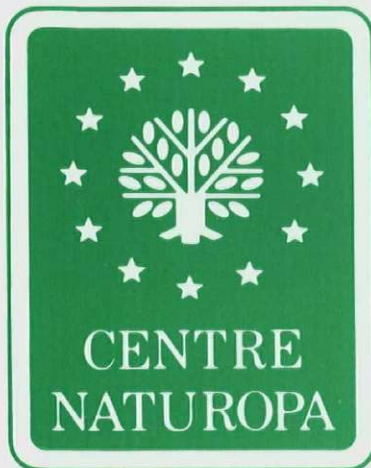
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Editorial <i>C. Narbona Ruiz</i>	4
Towards a sustainable environment <i>S. Sterling</i>	5
In Poland <i>S. Karwowski</i>	7
Integrating efforts <i>P. W. Bos</i>	9
In Hungary <i>E. Vajdovitch Visy</i>	11
Campaigning in Malta <i>D. Hamilton</i>	12
The Community <i>G. Vincent, G. Vergnes</i>	13
Scottish strategy <i>K. Sankey</i>	15
School Initiative Project <i>K. Kelley-Laine</i>	18
Voice of the Children <i>K. Eskeland</i>	20
Thinking and working together <i>J. Baines</i>	21
Unesco <i>A. Ghafoor Ghaznawi</i>	22
Field study centres <i>G. Cooper</i>	24
Central European University <i>E. Bellinger</i>	25
Teacher training <i>C. Oulton</i>	26
In Italy <i>G. Spinelli</i>	27
The Touch network <i>M. Caha</i>	28
Diversity within unity <i>R. Williams</i>	28
Port-Cros <i>P. Robert</i>	29
At the Council of Europe	30

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Towards ENCY 95

What is education and should it be defined, especially as regards the natural environment, its management, its resources and - man and his environment?

Most of us have long since lost contact with nature and the outdoors, the "rules of life", the miracle of the endlessly renewing circle of life - often disturbed, to use a euphemism, by us, by man.

The Council of Europe was a pioneer in this field but gave up this activity in the face of other priorities. Other organisations took over.

It is widely believed that education, especially in the environmental field, is a priority; people must be made aware of their environment, of their influence on and responsibility for it. Even in times of stress in fields such as international politics and unemployment, the nat-

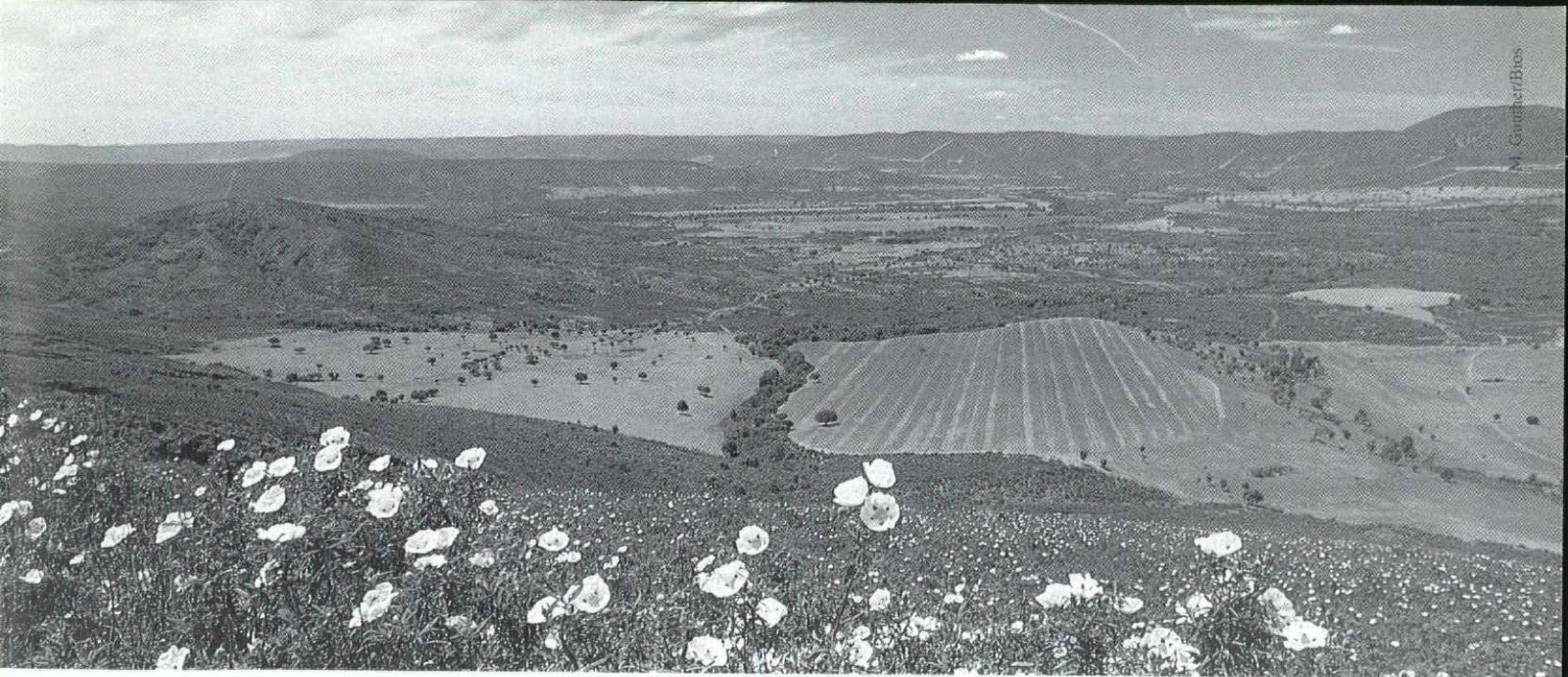
ural environment and nature conservation must not be forgotten or pushed from the front pages.

Preparing European Nature Conservation Year 1995, the Council of Europe hopes, certainly on national and regional level, that interest in and care for education for all groups of the population and for all ages will continue to grow and bear fruit. It is high time.

Naturopa 75 will be in support of the Centre Naturopa's Fourth Pan-European Tourism and Environment Colloquy, to be hosted by the Polish authorities in Warsaw in September.

This year's third issue will be dedicated to the great Council of Europe effort for next year: European Nature Conservation Year 1995. ■

H.H.H.



Editorial

In the course of the present legislature, the Spanish Government is facing a major challenge where its environment policy is concerned. Too little importance was given to the environment in the broad spectrum of sectoral policies during the period of intense economic growth following Spain's transition to democracy. As a result the volume of legislation enacted at central government level is insufficient and, worse, there are no models for co-ordinating decisions between one area of administration and another. It must be remembered that since 1982 Spain has become a highly decentralised state, one in which powers to implement environmental policies are vested wholly in the regional governments. Furthermore, those governments have been endeavouring with varying degrees of success to assume powers in regard to the treatment of solid urban waste and sewage that legally devolve upon the city councils, largely because the cost of applying increasingly complex technologies is out of all proportion to the financial resources available.

The central government retains a number of direct supervisory powers in connection with such matters as the conservation of the coastline and the use and treatment of water flowing in riverbeds that cross more than one region. It also continues to have a major mediating role with the institutions of the European Union, with regard both to the framing and implementation of Community rules, and to access to Community funds for capital investment projects. However, this role cannot be developed effectively until instruments of concerted action are devised which avoid dispersal of effort by establishing a direct relationship between the regional governments and the European Union, notwithstanding the not unimportant role already conferred on the local authorities in this context within the Committee of Regions.

Even within the central government, powers in respect of activities which have a significant impact on the environment are shared among several departments. The role of co-ordinating these areas of responsibility and

exercising direct powers in the formulation of basic rules applicable nationwide to the management of the coastline and the country's waterways, and also to the supervision of the national meteorological network, has been entrusted by the Ministry of Public Works to the State Secretary for the Environment and Housing.



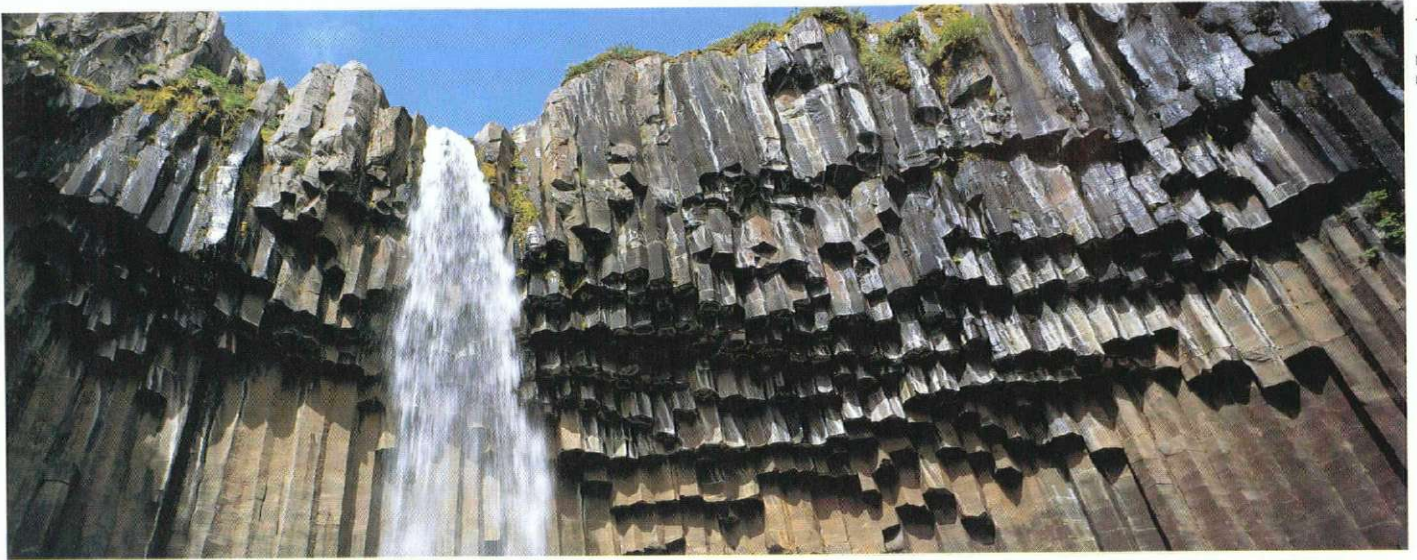
P. Pardo

For Spain to devise a national environmental policy strategy for achieving a model of sustainable development, agreements about political and administrative decision making will therefore have to be concluded promptly. This is not the only difficulty that has to be overcome, however, as the average Spanish citizen is by no means as environmentally aware as the majority of his European counterparts. The reason for this is partly that the current economic crisis is causing unemployment to be seen as the most serious problem affecting Spanish society - and a rapid resurgence of economic activity as the only remedy - and partly that in Spain, levels of atmospheric and other pollution, and of environmental damage generally are low by comparison with those in other countries.

Even so, the younger generations and the inhabitants of the large and medium-sized towns have developed a significantly greater degree of environmental concern in recent years and are demanding decisive action on the part of the public authorities. Such action will require the existence of effective instruments of citizen participation (a governmental advisory body, the Consultative Council on the Environment, was recently set up) and will involve the creation of more environment-oriented industries and the introduction of rules to facilitate the sharing of responsibility among all citizens: these include an appropriate water and energy pricing policy, more effective instruments for monitoring and sanctioning polluting activities and a more precise definition of the term "ecological offence".

As the end of the millennium approaches, Spain is facing grave problems of desertification - half of the country is having to contend with serious or very serious erosion - an alarming imbalance of water resources between one part of the territory and another and increasing deterioration of the quality of life in towns. Any genuine hope of finding a solution will clearly depend on the political priority accorded to the environment. ■

Cristina Narbona Ruiz
State Secretary for Environment and Housing
Spain



F. Zwardon



J.P. Varrin/Jacana

“In a context of change, especially on the international and intergovernmental scene, the Council of Europe figures prominently on account of its activities in the field of education. Unfortunately education in general, and environmental education in particular, are victims of that very change.

The problem of the environment is humanity’s number one problem and environmental education must be regarded as a priority. Particular attention should be given here to young people so that the world’s future leaders can learn to manage its affairs better than their elders.

I am confident that in the run-up to European Nature Conservation Year 1995 priority will be given to environmental education in all the countries involved as due tribute to the miracle of nature.”

Prof. Mario Pavan
 Chairman of the International Organising Committee
 European Nature Conservation Year 1995



E. Sattler



Fricss-Irmann

For a sustainable Europe

Stephen Sterling

"Environmental education saves Planet!" Is this a headline our children or grandchildren are likely to read sometime in the next century? Perhaps not, but the notion hardly exaggerates the very important potential of this approach to education, training and awareness-raising - a potential which was recognised in the UNCED document Agenda 21 which stated: "Education is critical for promoting sustainable development and improving the capacity of the people to address environment and development issues".

Such high-level recognition of environmental education is remarkable when seen in a historical context. Some 25 years ago, the term was hardly known. Now, it has been recognised by ministers of the European Community as "an integral and essential part of every European citizen's upbringing" and furthermore, a key instrument in the successful implementation of environmental policy at EC and member state level, as evidenced by the Commission's Fifth Action Plan for the environment. This trend is echoed in a number of member states where increasingly, policy-makers are beginning to recognise that environmental policy and public support through environmental education, information and participation must go hand in hand.

The emergence of environmental education

There are perhaps two main reasons for this trend. One is reflected in the history of environmental education. Since the UN Conference on the Human Environment of 1972, Stockholm, when the link between education and the quality of the environment was made, environmental education has received significant endorsement from international agencies who gave this area both status and support for programmes. These agencies included Unesco-UNEP, which began its International Environmental Education Programme in 1975, World Conservation Union (IUCN), and not least, the Council of Europe which initiated a series of influential courses and conferences on aspects of environmental education from 1975.

The second reason lies in the development of the environmental debate, which since Stockholm has shifted from a focus on single environmental issues to a growing realisation that environment and economics, or conservation and development, must be viewed together if either part of the equation is to be sustainable - and if we are to bequeath to our children and their children a healthy and resource-rich environment. The growth of this understanding, and understanding of its major implications, may be seen as part of a learning process which societies as a whole

need to go through. A fundamental change in thinking and practice is needed, as advocated by key documents such as the Brundtland Report of 1987, and Caring for the Earth - a strategy for sustainable living launched in 1991. Both these reports, and latterly Agenda 21, have emphasised the critical role of education in achieving shifts towards more sustainable economies and lifestyles.

Consensus on goals

Environmental education has its historical roots in nature study, and indeed study of flora and fauna and natural systems still has a vital place. However, the last two decades have witnessed an evolutionary process in environmental education particularly as regards content and methodology. Indeed, its embrace is so broad that many educational goals as well as environmental issues and topics are encompassed. There are many emphases within it - local environments, culture and environment, ecology, urban studies, heritage, conservation, development issues, global issues etc - and many methodological approaches. However, this diversity operates within a broadly agreed consensus on the philosophy and goals of environmental education, which still draws its inspiration largely from the Unesco Conference held in Tbilisi in 1977, which defined the goals as:

- to foster clear awareness of, and concern about, economic, social, political and ecological interdependence in urban and rural areas;
- to provide every person with opportunities to acquire the knowledge, values, attitudes, commitment and skills needed to protect and improve the environment;
- to create new patterns of behaviour of individuals, groups and society as a whole towards the environment.

Whilst the language may sound somewhat behaviouristic for our current times, these goals nevertheless remain as a powerful statement of intent and challenge for all educational practice and policy. In 1992, Chapter 36 of Agenda 21 added a further challenge by suggesting that all education needs to be reoriented towards environment and development and that national governments should "prepare strategies aimed at integrating environment and development as a cross-cutting issue within the next three years".

The European dimension

For Europe particularly, environmental education has a vital role to play, now and in the future - and for several reasons. Environmental issues are evidently Europe-wide, transcending national borders long before the Maastricht treaty heralded political moves in the same direction. The differences

in environmental quality and economic status between Western and Eastern Europe give cause for concern. Increasing European integration and homogenisation are leading to a reawakened desire both for more participation at local level and a rediscovery of local identity, of place and culture. Relevant to such concerns, environmental education can nurture the confidence, knowledge, values and creative skills that empower people to make a positive difference to the quality of their lives and environment whether at local community or international level.

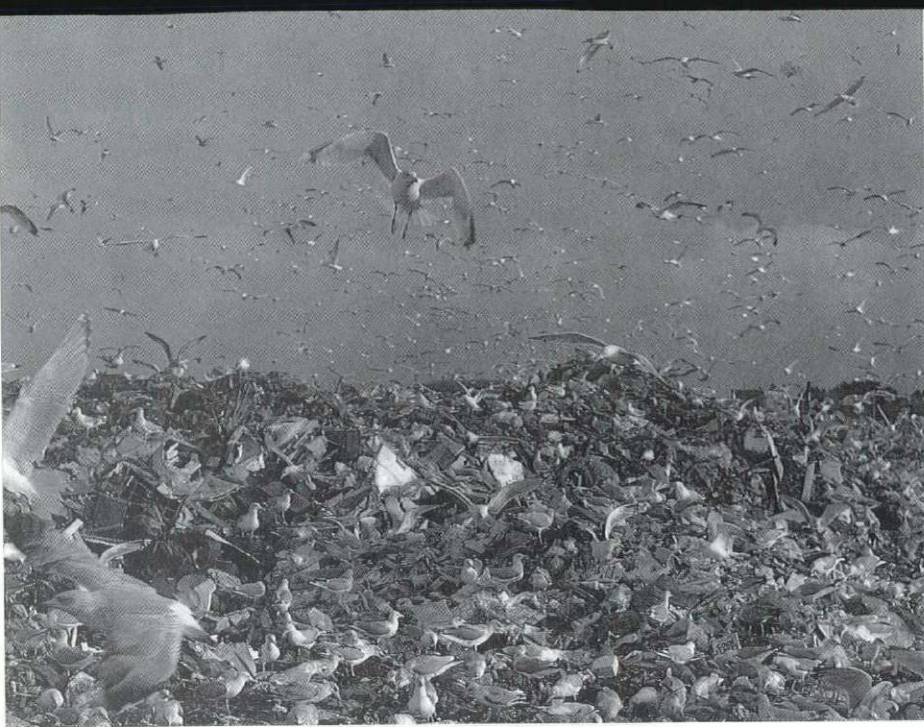
How much progress has been made?

How much progress has been made? The articles in this issue of *Naturopa* are indicative of some of the outstanding projects and networks that have both sprung from and fed the fertile soil of environmental education. Seen in a European growth context, one of the most encouraging trends has been the growth of international networks, from informal groupings such as "Touch" which brings together small groups of innovators from across Europe, to the larger projects such as the Environment and Schools Initiative which has done much innovative work in schools with support from the OECD. The European Community has supported international projects since, and particularly since the EC Resolution on environmental education of May 1988.

At policy level, a number of countries are beginning to implement policies which promote environmental education, although it appears that no government has yet fully worked out and adopted a national strategy which links synergetically with environmental and economic strategic planning.

Sixteen years after Tbilisi, nearly six years after the EC Resolution of 1988, and nearly two years since the Rio Earth Summit, the level of support for environmental education remains much more impressive in intergovernmental and governmental rhetoric (which is easy) than it does in terms of widespread support for practice on the ground, and active building and implementation of national strategies (which takes commitment and resources).

For years, examples of excellent practice in environmental education were to be found wherever there were teachers and other educators, field centres, and organisations who understood the benefits and effectiveness of the approach for the student, the teacher and the environment. From a regional or national viewpoint, however, good practice has always appeared localised and patchy. Now, partly through modern communications, it is much easier to exchange ideas, experience and materials. Advantage is being taken of



this situation as is evidenced in the growth in recent years of collaborative projects. However, environmental education organisations and projects, particularly at local level, are typically under-resourced and undersupported.

Environmental education is essentially interdisciplinary and holistic in orientation, and typically involves experiential teaching methods. This presents problems to educational institutions who feel they can only operate on a subject by subject basis, using traditional methods, but often great rewards to more flexible institutions in terms of enhanced learning and motivation amongst both the teachers and the taught. Despite an increase in interest, particularly in recent years, much more needs to be done in many areas, including teacher education, both at initial and in-service levels, research, and in extending environmental education and training practice in non-school sectors: higher education, business and industry, the professions etc.

There is a very long way to go before all people, and not least, all children, achieve a measure of environmental literacy commensurate with the scale of environmental problems that the world already faces. It may be that the enthusiasm of many students and educators, pressure from the high level of environmental awareness amongst the public, the facility of telecommunications, the links made by international environmental education networks, and the status afforded by EC and other inter-governmental statements, combine to lead to more systematic provision of environmental education for all, and before too long.

Pitfalls for policy-makers

Meantime, there are several pitfalls to be avoided by decision-makers. One is that they should avoid equating "education" solely with schools. If we are to achieve a more sustainable Europe, environmental education has to be life-long and provided throughout society in all sectors. Second, they should not see education and information as the same thing. Information may help raise awareness, but education implies a deeper process of personal and, by implication, social change.

Third, they should not confuse environmental awareness (which is relatively high) with environmental understanding (which is low), or understanding with the ability and willingness to change behaviour patterns. But neither should they worry through mistakenly equating environmental education with environmental campaigning: the considerable educational benefits of environmental education are well documented. Fourthly, they should not confuse high profile and limited life environmental education projects or schemes, however, good, with the need to provide continuing multidisciplinary or integrated programmes across all curricula, formal and non-formal.

Lastly, they should not expect education to change the world "single-handedly" or act as a substitute for environmental policy. Any change towards a more sustainable society and economy must result from a whole complex of factors including public opinion, appropriate media coverage, changes in technology, governmental economic instruments and policy, and involving all sectors of society. Not least, any educational strategy for the environment must be mutually reinforced, rather than contradicted, by other government policies. Furthermore, it must build on, rather than attempt to direct, existing initiatives and expertise.

Challenge and opportunity

Education has a special role to play - particularly if we are serious about environmentally sustainable development. The time is right for renewed support and action on environmental education in Europe; to fully implement the policy statements of the European Union, of Agenda 21, and national governments; now rather than later. In Europe, we have the accumulated expertise and experience of over two decades of environmental education development to build on. And we know that environmental education is effective. Meanwhile, both intuitively and from scientific evidence, most people are very aware that pressures on environmental quality and systems are becoming more rather than less severe.

Among the range of policy instruments open to government whether at national or local level, education is unique in being able to

"There is a very long way to go before all people, and not least, all children, achieve a measure of environmental literacy commensurate with the scale of environmental problems that the world already faces."

"touch" people, to connect people to nature, to each other, to the environmental and human consequences of their actions, and to the future. From the vantage point of the mid-nineties, this future seems marked by uncertainty and threats to well-being. If we fail to take the positive opportunity that still exists to secure it for sustainability through ensuring universal participative environmental education, later generations may not forgive us. ■

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In Poland

Sławomir Karwowski

The key aims of environmental education (EE) in Poland are to develop and promote awareness, understanding, knowledge, concern, responsibility, participation and action in the field of environment. Government policy documents indicate that EE can be an effective instrument leading to sustainable development. Concerning formal education, the existing situation is as follows:

Primary schools (age 7-15)

The elements of environmental education are found in the following statutory subject curriculum: social and natural environment (classes 1-3), biology and health, chemistry, geography, social studies. All of the schools have the same core curriculum. However, there is a possibility for the teacher to develop their own curriculum based on the core.

Secondary school (age 15-19)

The elements of environmental education are found in the following statutory subject curriculum: biology, health and environmental protection, military studies, geography, social studies. As with the primary schools, a teacher is able to develop their own curriculum while respecting the core curriculum. Vocational secondary schools: statutory subject: environmental protection and shaping of our environment, for all types of vocational schools.

Tertiary

The elements of environmental education are included in many subjects. No core curriculum exists. In 1991 two new fields of study were introduced: environmental engineering and environmental protection. There are many post-graduate courses of EE.

Approximately a thousand primary and secondary schools are very interested in environmental education ("green/ecological schools") and have some experience with introducing curricula in this field. The main difficulties in the current situation include the strict, rigid teaching methods focusing on knowledge of facts; a crowded curriculum; approach to learning is too scientific and not age-appropriate; not enough active learning methods, too little outside or fieldwork activities; very limited activities concerned with improving the environment; low environmental awareness among society; financial difficulties faced by many schools; inadequate teaching resources for teachers and students.

The government is preparing the school reform and plans to introduce environmental concepts in all subjects taught at education institutions as a cross curriculum subject.

With regard to informal education, many environmental education centres, foundations

and NGOs carry out educational activities to a limited extent and range.

National Environmental Education Centre

The National Environmental Education Centre (NEEC) was established in January 1992 as a division of the National Foundation for Environmental Protection. The Centre was created as an independent body to initiate, stimulate and strengthen EE activities in Poland.

NEEC is convinced that the combination of professionalism, enthusiasm and commitment of well-meaning environmentally-minded people will create a sustainable future. In order to achieve its objectives, NEEC will closely co-operate with government officials, staff of universities and research institutes which have experience with environmental programmes. The Centre is guided by the principles of respect for its partners and a professional approach to EE projects.

The NEEC has formulated its mission statement as follows:

- to inspire, encourage and develop environmental education in such a way that people are able to live in harmony with the environment. The major goals of NEEC are:
- to introduce environmental concepts into the national education system;
- to encourage and develop non-formal education;
- to maintain and develop support from the government for environmental education;
- to facilitate the development of a cohesive and committed environmental education movement;
- to gather and disseminate information on environmental education;
- to improve and search for new methods, techniques and practices of environmental education.

Since its founding, NEEC has been implementing and supporting many EE projects and activities. The main projects realised in 1994 will be as follows:

PHARE Phase II Environmental Programme

PHARE (Aid programme of European Union) consists of two major components:

- Development of the NEEC and Regional Centres including technical assistance (training, institution development, programme organisation and project management) and equipment provision. 20 new Regional Environmental Education Centres (REEC) were established in the beginning of 1994. The tender dossier is under preparation for technical assistance and equipment for NEEC and REEC.

- Programme development, including modernisation as well as introducing special programmes; environmental education packets for primary schools; modernisation of educational programmes for vocational schools which are related to the protection of the environment, natural resources and forestry; training of trainers in environmental education. The tender procedure for programme development has just been started.

British Environmental Know-How Programme

Phase II involves six separate projects: strategy development of NEEC, strategy development for environmental education in Poland, management approaches and organisational systems for NEEC, curriculum development focusing on EE teacher training (initial and in-service), resource development focusing on active learning methods in EE, and finally public awareness rising.

Each project will be delivered in form of planning sessions, workshops/seminars, working group meetings, producing documents, evaluation workshops. The programme is co-ordinated by NEEC and Field Studies Council (UK) with the participation of many Polish and English EE institutions. The planning stage has been completed and we will start the first workshops in February.

The Circle (Krag)

This project is realised in co-operation with the Institute of Sustainable Communities (USA) and the US Environmental Protection Agency, focusing on integration of local communities through development of environmental education. The programme involves teachers' college/university, schools, local authority, business sector and commune society. By introducing new methods of environmental education in schools the whole local community will be more aware about environmental issues, more concerned, more responsible, more integrated and some actions to improve the state of environment will be carried out. The pilot phase of

C. Ruoso/Bios



the project will be realised in three towns of about 100,000 inhabitants in each. We are now in the process of selecting the towns.

The Ozone Campaign

We have just started a big awareness campaign about low ozone pollution. The campaign is addressed mainly at schools but everyone can take part in it. It is planned that about 4,000 schools will monitor the low ozone concentration using simple bio-indicators (tobacco plants) methods. The campaign is organised in co-operation with WWF-Germany, Regional Environmental Education Centres, local education authorities and others. The main objectives of the project are to raise awareness about low ozone, to introduce new learning methods by experiments,

observation, to draw the conclusions which can lead to actions to change the situation.

The Roots and Shoots

The aim of the Roots and Shoots programme as founded by Jane Goodall is to provide a realistic working framework to enable young people to act positively and contribute to the well-being of life and the planetary environment. This initiative is intended to mobilise young people to take practical, positive actions in their environment. The pilot scheme of Roots and Shoots will involve several schools/environmental groups which prepare interesting proposals of practical action improving the environment around the school, in the village, town, etc. Based on the experience and results achieved by pilot scheme groups, the relevant resource will be prepared.

The British Council Environmental Programme

This is the continuation of the common project of NEEC and Field Studies Council to prepare regional teams of trainers. The project is focusing on out-of-classroom activities, fieldwork methods, planning and evaluation of such activities. Based on last year's experience and training, regional teams are developing an educational resource-package. ■

S. Karwowski

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The Eco-schools Award

Eco-schools is a Europe-wide project designed to encourage environmental education and action to reward schools and their pupils for their efforts to become environmentally friendly. The Eco-schools project involves the local community, the school and, where appropriate, the local authority, and will be of long-term benefit to everyone in the neighbourhood.

The Eco-schools project is being tried out this year in both primary and secondary schools in France, Denmark, the Netherlands and Spain. In the UK a small pilot study is initially being carried out by the Tidy Britain Group Schools Research Project, in consultation with selected primary and secondary schools and advisers. If it proves successful, the national Eco-school awards will be administered from Wigan by the Tidy Britain Group Education Officer. Each of the pilot-test schools will receive copies of *Our Environment* and *Inside Outside* (see attached leaflets) and guidance on carrying out an environmental review. Further materials will be available for secondary schools.

Schools entering the award scheme should have the commitment of the head teacher and class teachers directly involved as well as the approval of the school governors, parents and non-teaching staff for the five core elements of the scheme.

School environment committee

The school is asked to set up an environment committee consisting of the head teacher and representatives from teachers, governors, pupils, parents and non-teaching staff. The committee will meet to draw up a programme of action for the school and monitor the progress of the project. This committee may designate a small action committee to take care of the day to day running of the project.

Initial environmental review and action plan

The schools will be given a document which can be used as the basis of an initial review of the environmental implications of the physical features, practices and policies of the school and neighbourhood. This will be helpful in preparing the action plan which will identify areas where improvements are needed and establish specific targets and a timetable.

The action plan should include a system of monitoring and evaluating progress so that regular reports can be prepared for the whole school community.

It is worthwhile integrating the survey and targets into the curriculum in order to minimise additional work. Experience has shown that over-ambitious targets may fail and lead to loss of enthusiasm. It is wise to start with simple targets and schemes to ensure success. Building up to more ambitious targets is easier with accumulated experience.

Day of action

The school is asked to put aside one day a year for environmental action at which time everyone in the school will become involved in achieving one or more targets from the action plan.

Basic curriculum themes

During the pilot-test the participating classes are asked to study the theme of waste. In subsequent years the themes of water and energy will be studied. Teachers have the freedom to address the themes through any subject or topic.

Eco-code

During the year the pupils and staff will draw up an eco-code which will describe the nature and form of the school's commitment to environmental education and positive action to improve the environment. The eco-code will incorporate monitoring and evaluation of the ongoing programmes of action and of the day of action.

For further information:

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Integrating efforts

Peter Bos

In the course of the last decennia an impressive number of educational activities related to nature and the environment have developed in the Netherlands. Various NGOs and government agencies develop and supply teaching kits, handbooks, courses, excursions, training, fieldwork and the like. Many more groups and organisations are involved in running the activities, inside as well as outside the school system. The national government, together with provincial and local authorities, is involved in facilitating all this. In financial terms: in 1993 the national government spent 31.5 million Dutch guilders on environmental education; in 1988 this was 11.2.

In response to the presentation of a White Paper on Environmental Education in 1988 the Dutch Parliament has asked for more financial participation by ministries other than those of the Environment and Nature, and for more cohesion between the efforts of the national government and others. Finding a common denominator for a government strategy has turned out to be a nearly impossible mission. The field of environmental education has grown into a sort of supermarket, an enormous superstore that covers a vast number of products, clients and suppliers. The very nature of the subject makes matters even more complicated. After all, environmental education in its essence is a matter of values, norms and attitudes. Government interference therefore is a sensitive subject.

In relation to this a certain lack of real commitment has had to be overcome; in fact the process of designing an interdepartmental framework for environmental education has actually caused several ministries to reflect on their position on environmental communication for the first time.

Formal Education Plan 1991-94

A major breakthrough was the decision in 1990 of six government departments to make a joint effort to further implement environmental education in the formal education system. This interdepartmental project, coordinated by the Ministry of Education and Science, has two important characteristics:

- It aims at integration of environmental education in school subjects as well as the school itself. The latter approach in particular can be considered innovative, addressing the school organisation - including parents and management - as an agent of change.

- Schools are independent bodies and therefore the initiative for new materials, advice and support has to come from the bottom. New programmes have to support rather than replace existing governmental education activities.

About 70 million Dutch guilders, partly new and partly existing funds, have been allocated for the period 1991-94. Schools and intermediary organisations have been invited to come up with proposals, and as a result a number of projects in primary, secondary, vocational and agricultural education have been facilitated. Various forms of communication are used to stimulate interest in participation by schools and to disseminate information and experiences. Evaluation is carried out to gather information about whether the extra funds are effectively used to reach the main target: structural integration of environmental education in subjects and schools.

General Plan for Environmental Education

This injection in formal education did not replace the call for a strategic plan for environmental education, focusing in particular on

the non-formal sector. For this reason in 1992 a consultant was called in to advise on a strategy. International documents such as "Caring for the Earth" (UNEP/Unesco/IUCN) and "Agenda 21" (UNCED) as well as the advice on planning provided by IUCN's Commission on Education and Communication were gratefully used as sources of inspiration. The process finally resulted in the "General Plan on Environmental Education" that the Dutch Cabinet presented in autumn 1993.

In this document seven departments combine their efforts "to help individuals and groups with the process of learning about the way the principles of sustainability can be included in social and individual decisions and activities". The Plan focuses on the need for integration, cohesion and joint planning at all levels and between all actors, in particular with respect to the non-formal education sector. It is a strategy rather than a financial scheme although the search for higher quality and greater effect may subsequently result in more financial input. The basic objective is directly related to the principal message of the cited documents which is to help individuals and groups with the process of learning about the way the principles of sustainability can be integrated in social and individual decisions and activities.

An important aspect of the strategy is the strong focus on incorporation of environmental education into the daily business of all sorts of groups and organisations. This requires active involvement, if not actual initiative, of relevant intermediary organisations in planning and running the programmes.

As this is probably the most innovative aspect of the Plan, I will further elaborate on the background of this approach first.

Recent developments

In the last few years the importance of environmental education for social change appears to have gained new interest. Policy-makers outside the field of environmental education are starting to realise that real change demands the involvement of the entire community, both individuals and groups. The document "Caring for the Earth" sums up what it is all about: "Values, economics and societies different from most that prevail today are needed if we are to care for the Earth and build a better quality of life for all".

In the Netherlands the point was recently stressed in the evaluation of the national Nature Policy Plan. After extensive interviews and round table discussions with key persons the fundamental conclusion was drawn that the implementation of nature policy in the Netherlands has been severely slowed down by lack of commitment and participation in society, at all levels.

So the understanding is growing that there is no such thing as a fundamental change towards a society based on the principles of sustainability without wide involvement. Since, at

root, a change of values is needed, commitment of citizens will have to be built up.

At the same time, inside the field of environmental education a related development is taking place towards stronger orientation to the specific circumstances of target groups. Here the challenge is to relate as far as possible education on environmental issues as much as possible to the core business of groups and organisations. With the right commitment environmental education then becomes a tool for organisations to face their responsibilities in relation to the environment. So, a collective process towards general awareness and specific action is stimulated within certain social frameworks. The importance of this approach is that it helps to overcome one of the crucial problems of environmental education, namely the fact that social, physical and economic barriers often influence the individual's decision more than ecological arguments. By stimulating behavioural change in the context of the groups in which people function at least the social barriers, the reluctance of people to stand out and to act by themselves can be lowered. This preparatory approach must be considered as an addition rather than a substitute for more traditional forms of environmental education, which have proved to be a rich source of personal inspiration and motivation. I refer particularly to various types of outside activities that help to create a true relationship with our natural surroundings.

The strategy in practice

The idea of using specific social contexts is an important feature of the Plan.

Four spheres of activity have been selected in which much social interaction takes place and on the basis of which many citizens are organised. These are:

- quality of neighbourhood;
- leisure and recreation;
- sustainability in the work situation;
- consumption and lifestyle.

Many of the educational programmes that the seven departments fund at present are aimed at the same target groups within these fields. The spheres of social activity can be seen as frameworks, in which integrating these programmes on the one hand, and addressing the relevant intermediaries on the other, can be linked.

An independent manager with an annual budget of Dfl 600,000 (ECU 300,000) has been commissioned to turn these rather wide clusters into operational fields of action. This means, in the first place, further selection on the basis of priorities and possibilities, and in the second place identification of relevant social groups and their intermediaries. The manager is also responsible for the development of the necessary mechanisms for systematic exchange of information (between

suppliers, users and funders), for the quality of the content (e.g. implementation of the concept of sustainability), and for policy advice.

As participation of all relevant actors in this development process is an absolute necessity, communication is a key task of the manager. Working conferences and workshops are amongst the methods that are used.

After the developmental period of about 18 months an agreement between government bodies and NGOs on the establishment of a permanent structure for information, planning and policy advice will have to be put into practice.

The process towards a more systematic approach to environmental education in the

Netherlands is finally underway. The General Plan for Environmental Education offers good opportunities for integrating the efforts of all those who are involved in environmental education in the Netherlands, subsequently improving the quality and effectiveness of the educational programmes. ■

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In Hungary

Elizabeth Vajdovich Visy

The definition of EE given by IUCN (cf. J. Baines' article) accurately describes the goals of the Ministry of Environment and Regional Policy for environmental education in Hungary. However, it is important to define terms and lay out specific aims for Hungary's programme.

Environmental education should focus on areas of nature conservation, remediation, environmental protection and resource management. In addition, it must place emphasis on political, economic, technical and human aspects of environmental protection such as ethics, aesthetics and social issues. This education programme should not look just at theory, but also at how to apply principles and achieve goals through a problem and a value oriented process.

Fields and forms

Environmental education should be a lifelong activity. This programme must focus on several areas to make sure that the message is delivered to the widest possible audience. The focus is on programmes within the school system and those outside of the normal education channels. Promotion of both general and professional education programmes is important.

Special attention will be paid to co-ordination of programmes so they can build on each other and recipients can move logically from one level to the next. The specific elements and media are discussed in the two major areas of education, which are:

- public education in primary and high schools, colleges and universities, postgraduate training;
- the programmes in the private and non-profit sectors.

Public education

While the Hungarian public education system has been highly successful in many of the environmental sciences, it is essential that this be expanded and integrated into the entire curriculum.

It is also vital that environmental education is not simply the giving of knowledge, but skill improvement and mind and behaviour forma-

tion through an interactive teaching methodology. It is also significant to remember that the environment is the subject, medium and aim of this integrated approach. Following are the bases for programmes within each sector of the public education system.

Primary and high schools

Integration

Environmental education programmes should be integrated with the general curriculum at all levels and in all programme areas.

Implementation

Studies should not be limited to the acquisition of knowledge. It is essential that students' skills in analysis, communication, co-operation and implementation be emphasised.

Working in the medium

Students should have the opportunity to work within the natural and built environment at every opportunity.

Consolidation

The curriculum should offer the opportunity for periodic summary of the environmental programmes at a given level and offer the student the opportunity to make essential connections between the basic disciplines and the environment.

Testing

Environmental education should form a section of required primary and final examinations in the different subject areas.

Colleges and universities

The mission of this environmental initiative is to produce environmental professionals with a broad understanding of all of the factors that contribute to sound environmental policy and practice. Currently, Hungary produces many excellent technicians and scientists, but fails to integrate their research and education into the broader context of policy and action.

Within the scope of higher education, in both the universities and colleges, it is practical and desirable to introduce environmental technology and environmental management as basic or optional studies. These faculties should function independently and allow students the option of taking individual courses or to earn a degree in environmental sciences. If there is no possibility that an individual college or university can accomplish this, a

co-operative arrangement should be worked out to provide these courses on a nation-wide basis through parallel programmes sponsored by one or more institutions.

These independent environmental studies faculties should stress the interdisciplinary connections and the development of skills to implement environmental action at all levels. Creating these relationships and inter-relationships may require the modernisation of the entire higher education system. This inter-connection of studies will facilitate the creation of environmental protection and pollution control professionals who can meet the challenge of the coming years.

Professional education

The goal of professional education is the dissemination of information to the people who can take advantage of it most rapidly and put new technologies into use. The vehicle for this programme should be through independent professionals, professional groups or environmental faculties at the colleges and universities.

As stated in other sections of this report, it is vitally important that a broad base of knowledge is imparted to professionals and that this is done in an inter-disciplinary manner that stresses the inter-relations between science, society, industry and others.

A related activity that will drive the development of professional education is the ongoing qualification system development at the Ministry for Environment and Regional Policy for environmental professionals.

Extension service for specialised training

The importance of specialised specific training cannot be over-stressed. More and more professions will require specific knowledge of environmental programmes, protection and awareness. Extension courses can impart knowledge quickly to those who can most readily use it. These extension courses can also provide a method for professionals to build proficiency in important areas such as environmental impact studies, environmental audits, specific environmental programme application and various nature protection and conservation programmes. Extension courses (in a professional development mode) could also provide the basis for specialised teacher training in environmental sciences and the proposed integrated curriculum at primary and high school levels.

Another special form of these courses should be based on the modular course system dis-

cussed under the heading of colleges and universities. These courses could allow professionals to pursue a special interest or acquire knowledge necessary to perform their job duties. But the modular structure could also allow them to work toward certification or a graduate degree in an environmental discipline.

It is strongly urged that colleges and universities create environmental management development centres within the structure of their programmes.

Programmes outside the school system

A concerted effort must also be made to reach those individuals outside the formal education system. Environmental awareness and knowledge of the challenges facing Hungary are of utmost importance if improvement programmes are to be supported by the public. As with all of the programmes mentioned in this report, this one should be organised and systematic.

The aims of this informal education programme are:

- increasing interest in the environment and attention to it;

- influencing public opinion and behaviour;
- encouraging people and institutions to take action;
- increasing the desire for self-management and control of the environment;
- making the need for regulation and restriction understood and accepted by business, industry and the public;
- encouraging co-operation and community action to improve and protect the environment.

The form of this type of education is very diverse. It ranges from official information dissemination to general, non-degree education. The medium ranges from the mass media to adult education and includes the arts.

Public institutions such as museums and libraries and public education institutions will play a major role with exhibitions and programmes for the general public.

People's colleges (community education), once very popular institutions and experiencing a revival in Hungary, can spread general and specific information about the environment, increase knowledge of environment-friendly processes and adapting operating

systems to existing processes. One important aspect is that these programmes can share much of the knowledge and materials developed for formal education programmes.

Book publishing, videos and films are also important methods for distributing environmental knowledge and the forming of public opinion.

One other interesting development in this area is the growth of entrepreneurial activity in publishing, film and video making and publication of periodicals concerned with the environment. This market shows growth potential and should be encouraged by increased formal and informal environmental education programmes. These entrepreneurial organisations should be made full partners in this programme to improve public awareness and knowledge. ■

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Campaigning in Malta

Dustan Hamilton

ECO, the Malta Ecological Society, although a relatively new NGO on the highly populated but relatively small islands of Malta, has been working on a number of public awareness campaigns annually since it was set up in December 1991.

For each campaign, sample poster, sticker, leaflet and slogan designs are prepared and showed to possible sponsors, without which none of ECO's campaigns would take place. Once sponsors are found, printing takes place and press releases are issued to all the media. The printed educational material (poster and information) is sent to all banks, schools, hotels, government offices, cinemas, libraries and other public places to reach different sectors of the public.

If a sponsor is found, T-shirts are printed and used as prizes in competitions in the media to continue increasing awareness regarding the particular EE campaign. National picture/essay/poster/photo/poetry EE competitions get a very good response from schools. Students are also given EE sheets to colour in.

An annual event is the ECO International Children's Hearing, where children and youth get a chance to speak to the people in power. ECO also involves youth and children who are not actually involved directly in environment by organising joint activities, such as clean-ups, with them. These groups include resident associations, scouts, guides, youth and sport centres.

Seminars, discussions, protests in the streets and our own weekly "Ecological Panorama" programme on the international

radio station "Voice of the Mediterranean" all help to increase awareness, in the latter case even on a regional basis.

ECO volunteers conduct scientific surveys to see which problems must be tackled and we are constantly writing letters to the press regarding various issues. ■

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The Community

Gilles Vincent
Gisèle Vergnes

“Man has the fundamental right to freedom, equality and adequate conditions of life, in an environment of equality that permits a life of dignity and well-being.”

It was in these terms that the delegates to the United Nations Conference in Stockholm in 1972 launched the idea of environmental education.

Two decades have passed. The ethical dimension of environmental education is still a priority, for the destiny of humanity is at stake. We bear a major responsibility to provide future generations with a world that is fit to live in.

The success of campaigns to promote sustainable development will to a large extent depend on how individuals behave, what decisions they make and how well they understand environmental problems.

Although awareness of environmental problems is great and growing, the fact remains that a more comprehensive strategy is needed to inform and educate the public at large.

However crucial awareness may be as a vehicle of change, altering human behaviour is a long-term enterprise which needs to be started as early as possible in the educational process. Strictly speaking, the European Union has no common policy on education and the member states are alone responsible for their education systems; it does, however, have a role to play in giving support to such Europe-wide priorities as may be incorporated into a country's system of education; and environmental education surely features prominently among those priorities.

Community action

Implementation of the priority measures specified in the Resolution of 24 May 1988 comprises two aspects: information inter-

change on developments in environmental education within the member states; and the common needs and priorities discernible at Community level.

It is facilitated by the existence of a working party specially appointed for the purpose. Composed of representatives of educational authorities and due, this year, to be enlarged to include representatives of authorities on environmental questions, this working party is run by Directorate General XI, Environmental Education and Training Sector.

Better information

With the working party's assistance, the Commission has completed some of the priority tasks set out in the 1988 Resolution:

- the inventory of initiatives taken in the member states was presented to the Council in 1992 in the form of a position paper;
- a "vade-mecum" for trainers is being compiled and should be available early in 1995;
- a guide to institutes of higher education offering courses in environment-related disciplines was published in 1993 by the Office for Official Publications of the European Communities.

Assistance for pilot projects

The 1988 Resolution invites all member states to implement pilot projects on educational research activities. With the specific budget at its disposal for the purpose the Commission is able to provide financial assistance for pilot projects presented by teachers' and trainers' associations, training institutes, university research groups, and voluntary organisations pursuing extracurricular activities. In the field of teacher training, for example, encouragement was given in 1993 to the creation and experimental use of educational modules and materials.

Every year the Official Journal of the European Communities publishes an invitation to submit proposals relating to measures to promote envi-

ronmental education. To qualify for financial support, projects must comply with certain very precise selection criteria. They shall:

- generate a marked multiplier effect on a European scale;
- demonstrate an effective and balanced degree of co-operation among the partners concerned;
- have a direct transfrontier impact;

and should aim:

- to facilitate the lasting integration of environmental education in all systems of education;
- to promote the transfer and exploitation of innovative experiments.

Increasing public awareness and providing information

The above possibility relates only to projects intended for the education system. Associations and organisations operating outside that system may be associated with them through their work with pupils and teachers. For projects designed to increase public awareness or provide information about the environment, there is a different procedure which is also the subject of an annual invitation published in the Official Journal.

Prospects

The 1988 Resolution invites the Commission to organise meetings, seminars and symposia about aims and methods of environmental education with reference to the specifically European aspects.

A summer university will be held for the first time in September 1994, at the Commission's instigation. It will enable designers of projects already presented to the DG XI or project officers with national agencies, to meet the working party of the Environmental Education and Training sec-

tor and take stock of action in progress throughout Europe. It will also provide opportunities for profitable exchange with other intergovernmental organisations such as the OECD (Environment and School Initiatives programme) and the Council of Europe.

The participants will then be able to identify new ways of strengthening the position of environmental education at all levels of the education system and present their desiderata or recommendations to the policy-makers representing the member states.

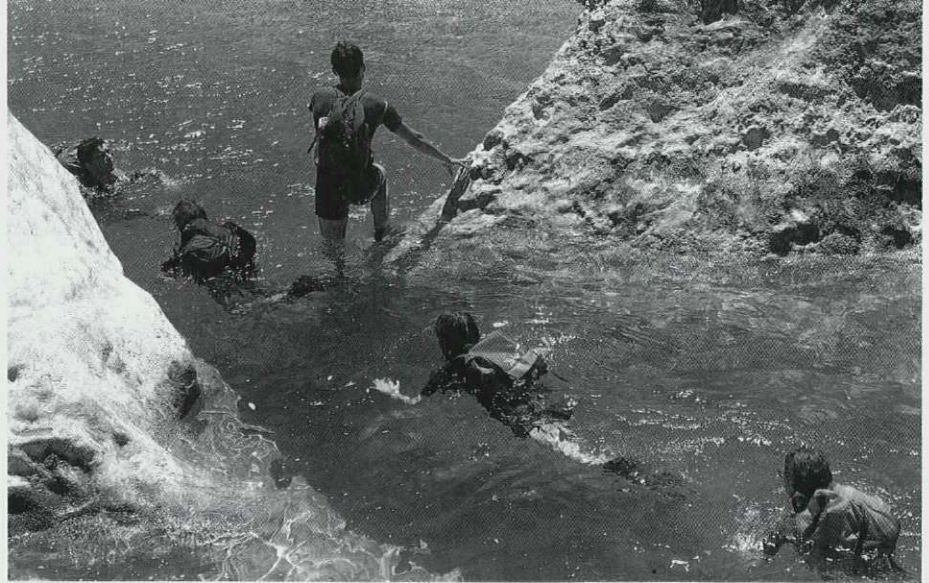
It is expected that the summer university will have a beneficial impact on the production and distribution of appropriate teaching materials. For despite the large number of products intended for schools (books, brochures, "ecological" video games etc) most of these foster only a piecemeal approach to environmental problems.

One of the Commission's major objectives, also pursued by some of the campaigns it supports, is to meet the demand for a fully comprehensive approach while making as many complementary local initiatives as widely known as possible. With its overview of matters as they stand, the Commission is in a position to prompt the creation of training manuals of Europe-wide relevance that take on board the knowledge that national frontiers are no barrier to pollution of the environment.

The final stage of the Community's action in the medium term is the preparation between now and the end of 1994 of the eagerly awaited report to the Council and the Ministers of Education on the progress of action on each of the points in the 1988 Resolution. It will then be possible to envisage a further stage in the integration of conservation in the educational processes. The idea, inspired by the recommendations contained in the Fifth Action Programme and in Agenda 21, is to devise a sustainable strategy valid up to and preferably beyond the final years of this century. Environmental education and policy-making should go hand in hand so that local stop-gap measures may be superseded by others which are forward-looking and worldwide in scale.

The task is a considerable one and the issue vital, for the only way forward is to develop in the minds of present and future generations a sense of solidarity towards all human beings throughout the world and for all time. ■

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School class in the river

E. Sautter

Basic texts

1987

Entry into force of the Single Act: a legal provision (Article 130) enables the Community to take whatever measures are necessary in order:

- to preserve, protect and improve the quality of the environment;
- to protect human health;
- to ensure the rational use of natural resources.

1988

A crucial text was submitted by the Commission to the Council and the Ministers of Education meeting within the Council. The outcome was Resolution 88/C 177/03 of 24 May 1988 which sets out the objectives and guiding principles and the action to be taken at the level of the member states and at European Community level in order to improve environmental education.

a. The member states are asked:

- to take all measures necessary for implementing interdisciplinary education in schools and in all educational establishments;
- to develop teachers' knowledge of environmental matters;
- to create and disseminate appropriate teaching materials.

b. The Community is asked:

- to facilitate the interchange of information among member states by producing inventories;
- to organise colloquys, conferences and seminars for the discussion of objectives, methods and curricula of environmental education;
- to place documentation on environmental issues at the disposal of the member states;
- to organise summer universities for teaching specialists;

- to produce a guide to institutes of higher education offering courses in environment problems;

- to work for the inclusion of the theme "environment" in the community exchange programmes of the Task Force on human resources, education, training and youth task force.

1992

In their conclusions (92/C 151/02), the Council and the Ministers of Education meeting within the Council confirm the crucial role of environmental education which "should be considered an integral and essential part of every European citizen's upbringing". They also note with satisfaction that the Commission's Fifth Action Programme entitled "A European Community programme of policy and action in relation to the environment and sustainable development" refers to the need for better provision of environmental information and education (Chapter 7.5).

"The importance of education in the development of environmental awareness cannot be overstated and should be an integral element in school curricula from primary level onwards.) (...) Environmental studies - whether separate or integrated into natural and social science studies or amalgamated with other studies in preparation for everyday life (such as civics, politics, industrial relations, hygiene and health care) - should be included in all primary and secondary school curricula by the year 2000 at the latest and be listed as a formal examination option as soon as possible after that date."

Still more recently, the Treaty on European Union, which came into force on 1 November 1993, includes two provisions (Articles 126 and 127, chapter 3) which enlarge the field of Community action in the sphere of education and vocational training. The role of the Commission in these fields can be seen as a natural response to the recommendation that "member states co-operate, exchange information and compare their experience on issues common to their education systems."

Learning for Life in Scotland

Kate Sankey

Scotland, a small country within the United Kingdom, has often had a distinctive contribution to make in response to challenges set by European and other international agendas. With the advantage of having most relevant government departments together in the Scottish Office under one Secretary of State, a largely autonomous education system and a relatively compact set of government and non-government agencies, we are able to mobilise our collective expertise and often to lead the way.

The publication of *Learning for Life* is a milestone (but only a milestone) in a fascinating process represented by two and a half year's work and extensive consultation by a multi-sector working group. The UK government is now citing the working group in its more recent environmental policy documents.

Our experiences in developing a national strategy have been shared throughout the UK, Europe and further afield, including the Global Forum in Rio and recently in New Zealand. The interest is certainly extensive, so it is very important to examine just what the achievements have been, or are likely to accrue from this highly intensive effort.

Firstly, some background to the initiative. Undoubtedly there was a degree of European influence at the beginning of the process in 1989. An appropriate response to the EC Resolution of 24 May 1988 was still being discussed at UK level and the responsibility of countries to make a contribution to the international dimension was growing in importance, partly as a consequence of environmental and development policy documents such as the World Conservation Strategy, 1980, and the Brundtland Commission Report, 1987.

Further European impetus came from the 1989 annual conference and meeting of the

NW Europe Committee of the IUCN Commission on Education and Training (as it then was), hosted by the Scottish Environmental Education Council (SEEC) and held in Stirling. The encouragement provided by our European colleagues at such gatherings is much appreciated.

At the time there was an important resurgence of interest in environmental matters. Perhaps significantly it was a time when the global and cross-sectoral nature of both environmental problems and their possible solutions was being faced. One reaction was the growing awareness that the development of successful environmental policies required bringing together a variety of structures and processes and most importantly required the support of the whole community. All this brought into focus the need for education and training as a policy tool of great potential.

The task of the working group was a daunting one as it strove to weave together the multi-various parts of the strategy. Here was an opportunity to take an holistic view and in sympathy with this approach, the larger canvas was divided, not by subject or sectoral boundaries, but by the fields of influence on learning, thereby stressing that learning is most valuable when it relates to our own experience and lifestyle. These learning contexts are the home, community, leisure, school, post-school education and the workplace. They provided the overall structure for the group's work and led to a strategy which focuses on environmental education opportunities which contribute to the achievement of a more environmentally sound and sustainable society, with benefits for people and environment together.

A valuable reference

Learning for Life has been welcomed as a valuable reference document providing a

comprehensive rationale for environmental education, and putting education in the local and global contexts of sustainable development and the principles for sustainable living. Following an extensive information gathering exercise the working group report on their findings and paint a picture of great and varied, if unco-ordinated, activity. With this as the backdrop the report proposes a strategy together with recommendations for its effective implementation. The strategy addresses seven key areas: policy, school curriculum, post-school education and training, research, information, networking and co-ordination, and review.

There are 12 strategic recommendations for government, its departments and agencies, and a further 20 for specific initiatives which the working group wishes to see progressed and strengthened by a wide variety of individuals and organisations.

Whether the summation of all the recommendations provide Scotland with a robust, workable strategy is yet to be tested. However, the responses received by the Scottish Office provide overwhelming support and enthusiasm and a willingness to contribute to the strategy's implementation. They also stress the need for a strong policy commitment from the Secretary of State for Scotland with an ongoing mechanism for reviewing, updating and evaluating progress. Nine months on, the environmental education community waits for the Scottish Office to make its statement setting out its commitments and priorities.

In the words of *Learning for Life*: "The vital thing is to start as soon as we can". ■

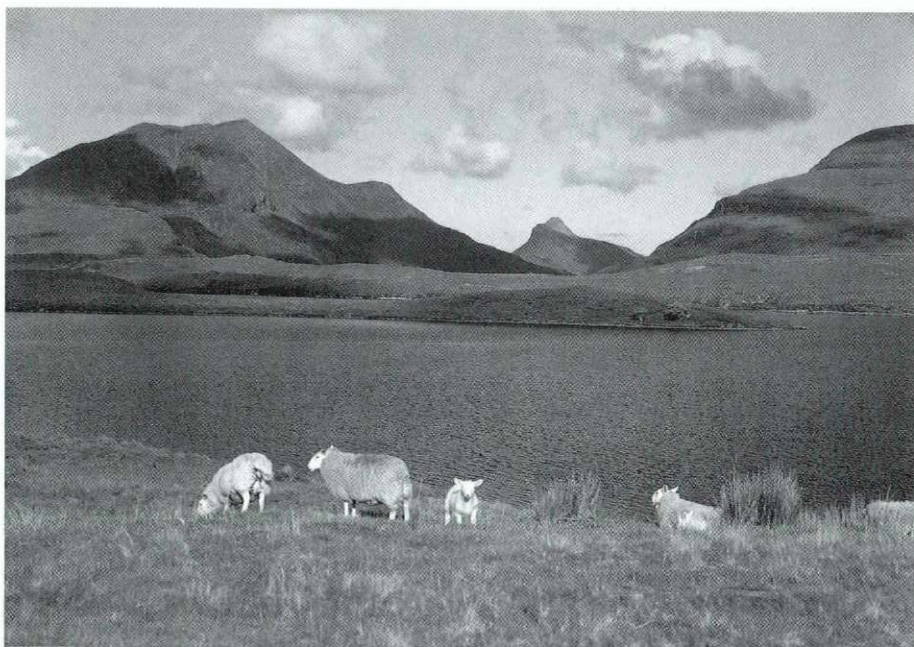
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S. Meyers



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School Initiative Project

Kathleen Kelley-Laine

What does an international project in education mean? What purpose does it serve? What benefits does it entail for participating countries? What is the hidden agenda?

These are often the questions that are slung at the head of international civil servants by those rightly suspicious neophytes who are considering whether or not to become involved in some nebulous international activity where neither the inputs nor the outcomes are ever defined. The stereotypic view of such activities often claims that international organisations serve only to legitimate present educational trends by hiring obscure experts to travel around the world to produce illegible reports that are discussed at boring meetings of country representatives, and then are buried forever in the depths of bureaucratic offices.

This stereotype needs to be reviewed, especially today within the context of a radically changing international scene: the inclusion of Eastern Europe in the Western world philosophy and the creation of a European state shed new light on supra-national organisations such as the OECD.

The Centre for Educational Research and Innovation (CERI) was created within the OECD in 1968, a time of what seemed to be a revolutionary change, and when profound questioning of social values and organisation was high on the national and international agendas. It seemed then that the creation of a centre whose mandate was to identify, assess and disseminate the most innovative educational practice in member countries was both necessary and timely.

Time has run on and we are in 1994, and the last 26 years have seen many educational innovations come and go in member countries - some people say that curriculum innovations are not effective enough, cheap enough, or quick enough, and what is needed is standardisation that works, that can be measured through performance indicators and controlled in schools by testing.

Nothing is easy

Simplifying solutions to a complex problem such as education is usually indicative of a defensive position. Perhaps the 1968 vision of what innovation could do to the education system was also simplistic - rapid change without a boomerang effect is impossible. It may well be that the ideology of innovation as the solution to solving the problem of the education system has waned just as have so many other ideologies, and what we are left with are the real problems, situated in specific contexts, with certain values, organisational structures, and actors within a complex system.

The Environment and School Initiatives Project (ENSI) is an activity of the Centre for Educational Research and Innovation, and is, I think, true to the original ambitions of the Centre: to combine questions of the teaching/learning process with questions of educational policy and to assist member governments in reflecting upon their policy developments by providing them with relevant international data.

Unlike a number of projects which are initiated by the Secretariat and then approved by the CERI Governing Board, the ENSI project was initiated in 1986 through a direct request by one member country, Austria. The idea was first developed at a Conference of Ministers of Education of OECD member countries held in Paris in 1984, when Minister Herbert Moritz of Austria underlined that environmental education was one of the most importance priorities for the future development of education. The CERI Governing Board then decided to include the project in its Innovation Exchange Programme and invited member countries to volunteer their participation.

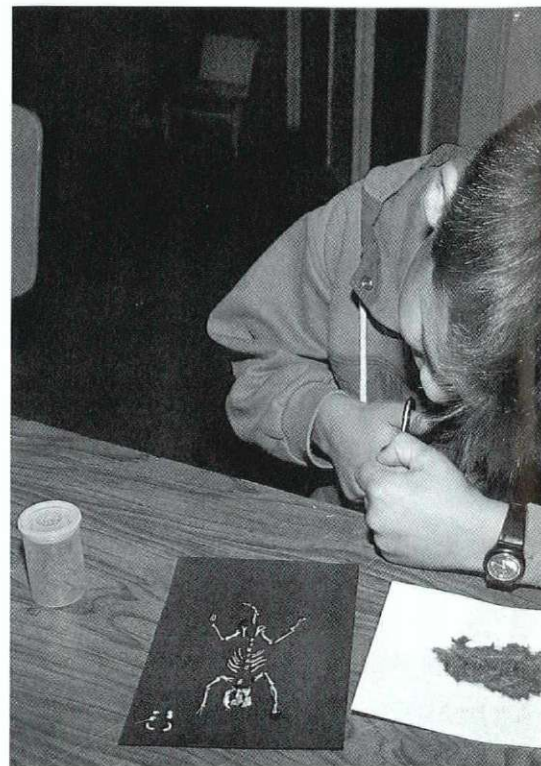
Innovative initiatives

Twelve member countries took up the challenge of identifying and setting up innovative teaching and learning environmental education initiatives in schools. Each country created a network of approximately 10 to 12 schools and appointed a national co-ordinator to provide the links within the country and also with the OECD Secretariat.

The objectives of the project were clearly defined from the beginning: rather than trying to constitute an international shopping list of criteria for good environmental education, the group of participating countries agreed to the challenge of defining a series of guiding principles that had no pretension of being value-free. Given the growing environmental imperative, the following criteria were seen to constitute a new responsibility for the education system, that is the promotion of environmental awareness and of dynamic qualities in students, such as initiative, independence, commitment and readiness to accept responsibility.

The link between environmental awareness and dynamic qualities provided the basic logistics for the choice of schools in participating countries. It was important to identify schools and teachers who were ready to take part in an innovative educational process, to analyse and document their work, and to practise flexible teaching and learning strategies. The following criteria for selecting schools were defined and school initiatives were to include four dimensions:

- personal involvement of students and their emotional commitment;



Piecing together a vole's skeleton from bones taken from a to the complexity of nature.

- interdisciplinary learning and research;
- reflective action to improve environmental conditions;
- involvement of students, at least partially, in decision-making, or problem-finding, on procedures and on monitoring their work.

The concept of environment was to be broadly defined, not limiting school initiatives to the natural environment but including social, economic, cultural and technological dimensions.

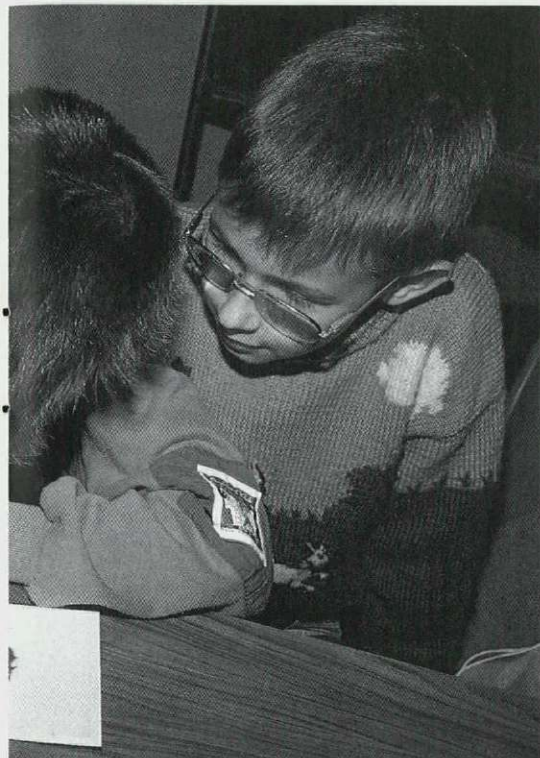
The activities of the schools were to extend beyond the boundaries between schools and community to links with outside institutions.

Different kinds of schools represented included primary, secondary and vocational schools.

Interpret within the context

The participating teachers were asked to interpret these criteria within their own national and local contexts, as well as to monitor their initiatives by reflecting on their activities with a view to continuous improvement. This type of strategy known as action-research was to make a significant contribution to gaining knowledge of environmental project work.

The results of this initial two-year phase were discussed at an international conference and public project exhibition in Linz, Austria, in September 1988, attended by 350 participants from the 12 member countries. 150 of the



G. Lacourrette

raptor's pellet is a good way of opening children's minds

participants were students from 9 to 19 years of age, accompanied by 120 teachers; other participants were administrators from ministries of education and environment, experts and researchers in environmental education.

The conference was considered to be a rather unusual one for OECD given the significant grass-root participation and was found to be highly successful in the way it succeeded in stimulating exchange among the different partners of the education system. When the event was reported to the Governing Board of CERI, the members were practically unanimous in their decision to continue the activity as an integral part of their main programme.

There had initially been a suggestion within the Secretariat that the ENSI project be subsumed under another project concerned with work on the curriculum in general. The Board refused this proposal and insisted that ENSI continue as a separate project. A specific plan for further work was then elaborated and approved by the Board.

Second phase

This second phase of ENSI was built on the results of the 1986-88 period and has the ambition of taking these further by:

a) expanding the network of schools involved, and improving the national and international exchange of these experiences;

b) strengthening the support structures for environment and school initiatives by the appointment of pedagogical support persons to work directly with the teachers, as well as a co-ordinator in each country. In many cases the pedagogical support persons are researchers based in a university and who are familiar with action-research methods;

c) taking action-research further with teachers to strengthen their research activities, especially that of producing knowledge;

d) exploring, analysing and developing critical reflections on the interaction between grass-roots environment and school initiatives and environmental education policy development in member countries. The policy context of ENSI is to be an integral part of each national report: in addition, six of the participating countries have requested the Secretariat to carry out an in-depth study of environmental educational policy developments. The international analysis of these developments will considerably enrich the present viewpoint on EE today;

e) examining the relevance of recent developments in the environmental sciences for environment and school initiatives. This is done through a number of organised encounters between specialists in the environmental sciences and teachers, researchers and the ENSI network of co-ordinators and pedagogical support persons. The issues explored are the following:

- how to include the notion of sustainable development within the general school curriculum (Netherlands);
- how to deal with complexity in EE (Italy);
- which notion of economy and ecology are most useful in EE (Germany);
- what are the values vehiculed in ENSI initiatives (Scotland).

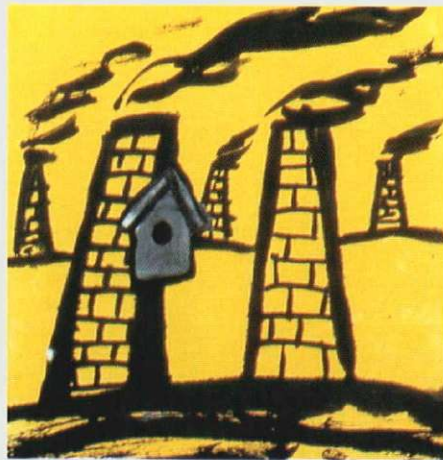
This is certainly an intensive agenda for 19 member countries participating in the present phase of ENSI. The grass-roots action-research methodology is still the basis upon which the project is constructed and a closer look at the policy context and macro-environmental issues are included to enrich the knowledge construction. To cite John Elliott in his analysis of the initial phase:

"If insights into implementation problems/issues are to be taken out of the realm of private experience and into that of public discourse via action-research, then teachers and other educational innovators need to develop a methodology for accomplishing this. It is an important task for CERI in its role as co-ordinator of international programmes of curriculum development and reform. Until this is achieved, the data base for comparing and contrasting innovation problems and possibilities across educational systems will be limited. And this will constrain the quality of international discourse on the problems surroundings educational innovation."

These words may be the foresight into the challenge that awaits international organisation such as the OECD/CERI - provide insightful data, not only for administrators

and decision-makers, but also to those who are able to use the data to continue constructing their own knowledge and further their own daily problems of education, rather than to spin dreams condemned to disappear as quickly as they emerge. ■

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Voice of the Children

Kristin Eskeland

Children all over the world are worried about the future, even if they don't always talk about it. They must be given the opportunity to express their concerns, not only to parents and teachers, but where it really belongs, to decision-makers. Children are not always right, but they have a right to be heard and to be taken seriously. If we do not listen to young people, we risk raising a generation who is willing to engage in acts of terrorism in order to save the future, or in my opinion much worse, young people who have lost hope and couldn't care less.

Voice of the Children is an international campaign which was launched in 1991 after a very successful Children's Hearing on environment and development in Bergen, Norway in May 1990. The aim of the campaign is to give children the opportunity to voice their concerns, first and foremost locally in their own countries, but also internationally. We feel that children need to play an active part in the democratic process and that they need to know how.

The campaign grew quickly from one successful Hearing in 1990 to similar events in more than 40 countries all over the world. 20 of these countries were invited to send one child each to Rio de Janeiro, to participate in the Global Children's Hearing at the Earth Summit in 1992. It became obvious from the activities all over the world and the enormous enthusiasm in Rio that Voice of the Children was not to be discontinued!

The Rio Hearing was followed by another event in Austria, prior to the UN Conference on Human Rights. 37 young people, mostly from Europe, but with a few representatives from Latin America and Africa, spent a week debating what they felt were the most important human rights. Their views were presented at the conference in the form of an impressive document and a huge tree with all their wishes for a better world written on the colourful fruits. Children all over the world show that their main concerns are the environment, peace and human rights like the right to an education and a life without violence.

Children's hearing

In autumn 1993 the International Peace Festival for Children was organised in

Lillehammer, Norway, as a part of the cultural build-up towards the Olympic Games. 88 children from 34 countries spent nine days together, talking to each other about their experiences, their ideas and their concerns, preparing a public presentation, a creative performance as well as a hearing.

So what is a Children's hearing and how is it organised? The basic idea is to give children a say, to give them the opportunity to speak to people in power. It can be done in many ways, depending on the traditions and culture in each country. Voice of the Children has mostly done it by inviting 5-10 children, aged between 11 and 15, to raise their concerns, whatever they may be, to 4-6 politicians or other people of influence. The press, other children and adults are invited to be present. The children participating will be seated at one table, the politicians at another. The children are in charge, their words are to be heard, the adults should be listening and answer only when challenged.

It may be tempting for politicians to use the opportunity to make lovely speeches without really intending to follow up. A chair person, who is able to make sure the adults don't run away with the show, therefore has an important role.

Another very important point is that the children playing an active role in the Hearing must be part of a process in which many children participate. Voice of the Children want to give ordinary children a chance to speak about their own, personal experiences and ideas, not a limited number of very knowledgeable kids who are able to speak the language of the politicians themselves. Children are invited to come up with their concerns by letters or paintings, by home-made post cards or by participating in local workshops. This process could be organised by local NGOs or by schools. The children to participate in the Hearing should be elected among the children who have participated actively in this process, preferably by their peers.

Local process

This local process, where the children talk about their own experiences and the situation in their community, is the basis of the Voice of the Children campaigns. The simplicity is the beauty of it: workshops and hearings can

be organised in a local school, in a scout troop, in the city hall or at an international conference. The important thing is that many children are involved, and that they are genuinely concerned with the questions they raise. Adults are facilitators only, not to lead the process.

1994-95 will be devoted to a world-wide campaign along these same lines, giving children the chance to present their concerns to their own leaders, and then later to world leaders in connection with the UN 50th anniversary in 1995. The one main aim of the campaign will be to give children all over the world a day of access to leaders and to the press. There should be at least one day per year when people in power are willing to listen to children and take their concerns seriously.

The UN Convention on the Rights of the Child gives all children the right to speak on their own behalf about their concerns. Whether children are concerned about the environment, about their own lack of education or clean drinking water, about wars between countries or violence in their own homes, we the adults must learn to listen and to take their experiences and their ideas seriously. Children are not always right, no more than adults, but they have a right to be heard.

The Voice of the Children campaign has so far been financed by the Norwegian government, Unicef and the Karibu Foundation. It is run by two coordinators, Patricia Jalil for FUNAM, Argentina and me in Norway. ■

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Thinking and working together

John Baines

What is it that makes me and hundreds of other people around the world become part of the IUCN, the World Conservation Union's Commission on Education and Communication? I hope by the end of this brief article you will understand why and might even wish to support it and work for it.

The International Union for Conservation of Nature and Natural Resources is now known the World Conservation Union, or IUCN for short. It was set up after World War II to promote the conservation of nature and natural resources. It is still unique on the international scene because its membership brings together governments, government agencies and non-government organisations. In 1993 it had 773 member organisations spread across 123 countries.

It exists to serve its members. It represents their views on the world stage and provides them with the concepts, strategies and technical support they need to achieve their goals. The headquarters are in Gland, Switzerland, and from there a secretariat co-ordinates the programme and leads a number of conservation initiatives. However, the bulk of its work is carried out through thousands of volunteers who belong to project teams and action groups in one of the six commissions. The Commission on Education and Communication (CEC) is one of the commissions and as a member of it, I am one of the thousands of volunteers whose small contribution, when added to the contributions of others, helps establish the theory and practice of environmental education worldwide.

A precursor

The CEC can claim to be the earliest international group promoting environmental education. At its conference in Nevada, USA, in 1970, it produced a definition for environmental education which is still accepted and used around the world as a foundation on which to build education programmes. For those who may not have seen it for some time, here it is again:

"Environmental education is the process of recognising values and clarifying concepts in order to develop skills and attitudes necessary to understand and appreciate the interrelatedness among people, their culture and their biophysical surroundings. Environmental education also entails practice in decision-making and self-formation of a code of behaviour about issues concerning environmental quality."

For much of its life CEC has had to administer its own affairs through the chairperson and a small steering committee drawn from members. It is a sign of IUCN's support for

education that it is maintaining an executive officer in Gland who is responsible for co-ordinating the education and communication programme and supporting the global network of volunteers that make up CEC.

But what is it IUCN expects from CEC? In *Caring for the Earth* IUCN lists nine principles for sustainable living. All of them have implications for education because without a means of helping people to understand their importance and to live sustainably, the principles will remain ideals. Education is particularly important in enabling people to "change personal attitudes and practice" through helping people to re-examine their values and alter their behaviour (Principle 6) and in enabling "communities to care for their own environments" (Principle 7) through training and information dissemination.

Achieving the principles

CEC's work programme is designed to contribute to the achievement of the principles. It will do this by advising the IUCN secretariat on education activities, by developing and supporting education within other IUCN programmes and by developing its own activities and programmes. For example, following the Earth Summit, CEC prepared a document to guide those preparing national strategies for environmental education.

CEC also produces a newsletter called *Nature Herald*. First published in October 1991, there have been four issues, each one providing news about IUCN, major international environmental education events, CEC projects around the world and viewpoints from CEC members.

CEC operates at both international and regional levels. In some part of the world, members have set up regional networks or committees. The two oldest of these are in Europe. The East Europe and North-West Europe Committees were set up in the 1960s and have met annually since then. The committees hold conferences in a different member country each year. Topics addressed in recent conferences have been agriculture and education, education and sustainable futures, education and sustainable tourism and preparing for education for sustainability.

Merging of committees

In 1984, the two committees held a joint conference in Finland and since then have repeated this every other year. This co-operation has paved the way for the committees to decide to merge because changes in Eastern Europe are making co-operation on common themes easier and more relevant. Members are involved in frequent personnel exchanges

as part of East-West initiatives such as the European Union PHARE programme and the UK Environmental Know-How Fund.

The two committees will also merge with the younger South Europe Committee to make an all-Europe committee. It will be launched in 1994. Its main purpose will be to facilitate the exchange of information and ideas about environmental education between European countries.

I say "environmental education", but since the publication of *Caring for the Earth* and the Earth Summit in Rio, the concept has been expanded to become education for sustainability - a concept linking environmental and development education. How this is to be integrated into education programmes is the major challenge for IUCN's Commission on Education and Communication in the years to come. ■

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Approach through games





A. Ghafoor

Working in the school garden, discovering composting (right) are means of learning to manage one's environment.

Unesco

Abdul Ghafoor Ghaznawi

Environmental education can become most relevant, effective and functional when its goals and objectives as well as its implementation are based on recognised needs of its target groups at international, regional, national and local levels. The need for environmental education (EE) at the international level was recognised and its development requested through Recommendation 96 of the United Nations Conference on Human Environment, Stockholm, 1972, which stated that the "Secretary General, the Organisations of the United Nations systems, especially the United Nations Educational, Scientific and Cultural Organisation, and the other international agencies concerned, should, after consultation and agreement, take the necessary steps to establish an international programme in environmental education, interdisciplinary in approach, in school and out-of-school, encompassing all levels of education and directed towards the general public, in particular the ordinary citizen living in rural and urban areas, youth and adult alike, with a view to educating him as to the simple steps he might take, within his means, to manage and control his environment".

The above-mentioned mandate has served as a landmark in the recognition of the need and promotion of environmental education as an important measure for fostering the protection and improvement of the environment by all the target groups mentioned therein. The fundamental contribution of this mandate has been its impact on concerned organisations and institutions who have taken actions in the creation of programmes such as the Unesco-UNEP International Environmental Education Programme (IEEP), which has served as a multiplier effect in the promotion and development of environmental education for all types and levels of education at international, regional and national levels.

International Environmental Education Programme (IEEP)

In translating Recommendation 96 into actions, it was in 1975 that Unesco in co-operation with UNEP launched the

International Environmental Education Programme (IEEP). Since then, IEEP has been in operation in the Environmental Education Unit, Unesco Secretariat, Paris.

The Programme's objectives are to develop the philosophy, goals and objectives and guiding principles of EE as well as strategies for curricula, materials and personnel training for all types and levels of education. Its long-term objective has been to develop, on the part of individuals and communities, environmental awareness, knowledge, positive attitudes, commitments for actions and ethical responsibilities for the rational use of resources and for the protection, improvement and development of the environment with due consideration given to the development needs of future generations.

It is executed on the basis of established guidelines, needs of member states and supervised by a steering committee and continuous evaluation of its whole operation or certain EE activities. The general policy and guidelines to this effect are set in a Memorandum of Understanding. Similarly, IEEP is implemented in close co-operation with UNEP, UN agencies and governmental and non-governmental organisations and within the context of the UN system-wide medium-term environment programme.

The execution of the activities is supervised by a steering committee consisting of senior decision-makers in environmental education. The steering committee meets once a year. The achievements and constraints of actions at international, regional and national levels are subjected periodically to an evaluation done by outside consultants. Specific activities are subjected to evaluation as deemed necessary. Through the above series of continuous guidance, control, evaluation and consequent updating, the Programme has emerged after about 20 years of operation as one of the exemplary EE inter-agency co-operation projects in the UN system.

In Rio

1992 was a challenging and unique year in the history of the Programme because governments during the Earth Summit had the occasion to express their view and comments on the contributions, successes and failures of the Programme and make decisions for its functions for the future. It was a rewarding year because governments supported Unesco

for its services of imparting awareness to decision-makers for EE development to reach the grassroots of education in the member states. The Programme received explicit mention in Agenda 21.

After Rio

It may be stated that the Education Chapter of Agenda 21 finds its roots in our work. The same Chapter of Agenda 21 finds its future in Unesco where it will be best executed in the framework of the Programme and in the context of its recognised experiences and success and its direct contacts and collaboration with UN bodies, with ministries of education, curriculum development centres, teacher education institutions, technical and vocational schools, universities, non-formal and adult education centres, basic education projects as well as non-governmental organisations in our 172 member states.

Currently Unesco as Task Manager is leading the preparation of a comprehensive review of the UN system-wide EE programme for 1992-93 and a consolidated joint UN system-wide environmental education programme for 1994-95 to reflect the integration of UNCED decisions into existing UN programmes. The Programme's emphasis for 1994-95 will be on interdisciplinary activities in the context of Unesco's interdisciplinary and inter-agency project on environment and population education and information for human development.

Impacts and achievement

The Programme's mechanisms of operation are exchange of information and experience, research and experimentation, curriculum and materials development, training of personnel and international co-operation.

In this context, the impacts and achievement vary from raising the environmental awareness of high level decision-makers to fostering EE teaching/learning at the grassroots in the member states and the following are a few selected examples:

The Programme has involved high level decision-makers in its activities which has contributed to their environmental awareness. Almost all international, national and regional activities of the Programme have been inaugurated and addressed by concerned high level decision-makers such as



A. Ghafoor

Speakers of Parliaments, ministers of education or environment, in the member states.

Unesco in this framework has developed the holistic concept of the environment (natural and man-made), the philosophy, goals and objectives, guiding principles of EE and strategies for their incorporation into the formal and non-formal education sectors.

Unesco and UNEP have developed an international strategy for action in the field of environmental education and training for the 1990s, which has since served as an important example and resource material for the development of national strategies and action plan in EE in several member states.

The Programme has developed documents on strategies and guidelines for the integration of EE into primary and secondary schools, pre-university technical and vocational education, teacher education and university general education and has trained concerned educational decision-makers in all regions on their effective adaptation and use at national level through 50 international, regional and subregional training seminars. Trained educators have served as multiplier effect in furthering educational change with respect to EE.

The Programme has achieved the development of the environmental education series containing at present 48 prototype EE modules especially curriculum prototypes for primary and secondary schools, technical and vocational schools and their corresponding teacher education programmes. The local adaptation of these prototypes have been fostered through 150 pilot projects and 160 national training workshops in the member states. Trained educators have served as multiplier effect in furthering environmental education at the grassroots level.

The Programme has emphasised EE teaching/learning with investigation and problem-solving approaches as early in schooling as possible. In this context the use of the environment as a living laboratory is encouraged at all levels of education. This facilitates teaching/learning and saves funds for classical laboratory set-ups and equipment.

Student-centred relevant activities such as gaining experience in recycling newspapers, composting the canteen waste, school gardening and games are just a few examples promoted in schools in Malaysia. These

activities lead to useful output and, thus, they make teaching/learning more relevant to the immediate environment and to daily life.

The Programme's major impact in the exchange of information and experience is achieved through its quarterly newsletter *Connect*, published in eight languages and disseminated to 20,000 institutions and professionals in the world. Similarly, the directory of institutions active in EE promotes interaction among 1,500 institutions in all regions.

Major challenges

EE's gained impetus needs to be maintained and it should further be directed towards the grassroots level where the action is.

Awareness and involvement of high level decision-makers are to be promoted further in order to facilitate decision-making concerning the development of EE for sustainable development at national level.

EE has to focus on deciphering the philosophy goals and objectives of sustainable development and on incorporating them into teaching/learning messages for various target groups in the formal and non-formal education sectors with due consideration given to on-going educational systems, environment and development priorities and realities and socio-cultural values. This requires research, curriculum and teacher education renewal, interdisciplinary and problem-solving approaches and student-centred activities.

EE must empower individuals and communities, as called for in Agenda 21, for making informed decisions concerning environment and sustainable development issues that affect them individually and collectively at local, national and international levels.

EE must find through research the seeds of concepts and practices of sustainable development in major cultural and religious contexts especially in developing countries. These seeds could serve as the best anchoring points for furthering rational and sound resource use, equity and eradicating poverty.

A major challenge to EE is to harmonise the needs and actions of environmental interventions and sustainable development priorities with the needs of a decent life-style in the social sector, with objectives of industrial

and agricultural sectors for sustainability and with the skill potentialities of the business sector. Much research and investigations are needed for revising current policies and guidelines and for finding new ways and means of harmonising the social, industrial and business sector objectives, needs and outputs towards sustainability in contemporary society. In other words, EE has the challenge of promoting "learning to be" in the environment as the only home for the present and future generations of the human family.

Opinions expressed are those of the author and they do not necessarily coincide with those of Unesco. ■

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Field study centres

Geoff Cooper

Britain was the first country to develop the concept of field study centres which promoted an academic approach to fieldwork in geography, history and biology. There are now hundreds of field centres across Europe. They vary from substantial residential buildings with professional staff to simple unstaffed bases. Some are closely linked to formal education with young people taking courses at centres as part of their curriculum. Others provide opportunities for informal education out of school time.

These centres have provided many academic and social benefits. They have encouraged an interest in the environment through first-hand investigation and experience. Students are often motivated by their new environment and teaching and learning methods can be flexible. Learning is experiential and involves co-operation, discussion and decision-making. Fieldwork can enrich aspects of the formal curriculum and lead to better student-teacher relationships.

Recent research (Joy Palmer, 1992) has shown that "outdoor experiences" such as those provided by field centres may be a major influence in developing a long-term interest in the environment. But to what extent have field centres met the challenge of environmental education in its true sense? Their programmes have often concentrated on learning about and through the environment. On occasions they use the environment as a laboratory rather than an opportunity to develop feelings and kinship to the natural world. Studies in countries as culturally diverse as Hungary and Japan have shown that an understanding of ecological concepts has not produced changes in attitudes and behaviour (Andras Victor, 1991). Young people may return from a field centre more knowledgeable about a particular environment, perhaps more sociable and with new interests, but are they prepared to take action for the environment? Have they been encouraged to adopt a more sustainable lifestyle?

How can centres educate for sustainability?

I believe the following skills and qualities are essential if we are to educate for sustainability:

- self-esteem, confidence, motivation;
- co-operation, trust, empathy;
- communication skills including negotiation and decision-making;
- an ability for critical thinking, lateral thinking, problem-solving;
- self-reliance, an ability to take responsibility for one's own actions;

- future thinking;
- feelings of belonging to the natural world and an understanding of our relationship to all life on earth;
- creativity, imagination, a spiritual and personal response to the environment;
- an ability for reflection and evaluation.

Field centres have great potential in encouraging these skills and qualities which involve the "whole" person. They need to develop courses which encompass feelings, analytical and aesthetic thinking and personal and social skills. I believe the traditional concept of a field centre is no longer valid and we should be establishing environmental centres to develop more sustainable lifestyles.

What are the characteristics of these environmental centres? It is not enough for them to encourage saving aluminium cans or planting trees, changes must affect the whole life of the centre. Too often centres have become synonymous with buildings and their maintenance rather than with organisations that can facilitate environmental change. The starting point should be to clarify the aims and philosophy of the centre and match these to the needs of potential participants. The philosophy should permeate the attitudes and behaviour of staff and students, the curriculum, methods of learning as well as the physical environment of the buildings and grounds of the centre. In moving towards greater environmental awareness and action, centres may find the following guidelines useful:

Guidelines

The aim should be holistic education. Personal, social and environmental awareness and skills are all part of the same process. This ethos should permeate the work of the centre.

Centres should move away from narrow programmes based on academic fieldwork. They should broaden their base to include other approaches, for example, through art, drama or problem-solving, which encourage environmental learning.

Centres should question the importance they place on activities. Are they an end in themselves or used as a vehicle for learning? Are there opportunities to "plan, do and review"?

Centres should develop programmes in consultation with students to give a sense of ownership and self-reliance. The "atmosphere" and organisation of the centre should be conducive to this process.

Teaching and learning styles should be varied and flexible depending on activities and situations. They should be designed to encourage all students to achieve their poten-

tial. Centres can unlock talent which has failed to emerge through formal education.

Centres should address all aspects of environmental education from awareness, understanding and the development of skills to the discussion of attitudes and values and the ways in which action can be taken. They should tackle the major ecological concepts which govern all life on this planet. Through environmental issues they should also introduce economic and political systems and how they influence the environment. (In a survey of environmental education centres in Europe conducted by Aktion Fischotterschutz in 1993 only 15% of centres stated that "political awareness and participation" was a focus of their work.) The aim should be to encourage citizens who are aware and environmentally competent.

Centres should have an "open" policy fostering links with the local community and other organisations and agencies working towards similar aims. They should look at ways of sharing expertise with other centres and encourage in-service development of their own staff.

Centres should try to improve their own environmental actions, for instance in terms of energy saving, recycling and use of materials. They should examine their activities and use of sites and ensure that these are compatible with their overall aims. There should be attempts to improve environments through practical conservation.

Through their own example, centres should discuss with leaders and participants on courses, ways to make improvements in their own actions and encourage them to adopt more sustainable lifestyles.

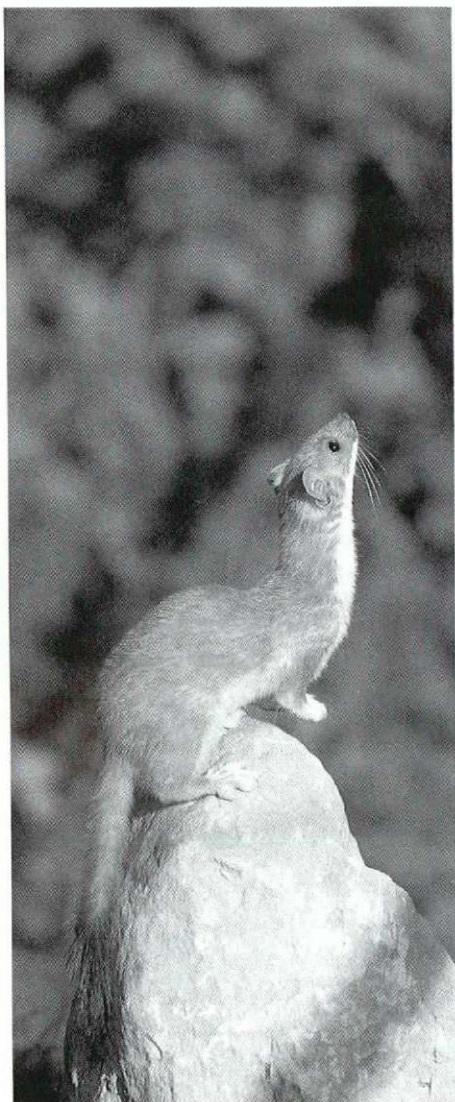
Centres should try to relate local issues to global patterns. This message should be positive, forward-looking and attempt to broaden horizons and foster international understanding.

These guidelines present a challenge to field study centres. There is a need to re-assess aims and build new programmes which are relevant to the development of more sustainable lifestyles. ■

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Ed Bellinger

The Central European University (CEU) came into existence in 1989 at the time of the major political changes taking place in that region. Its founder was George Soros, the international financier and philanthropist and a fierce exponent of the "open society". The CEU has two centres, one in Prague which deals with art history and economics and one in Budapest which deals with law, medieval studies, politics, European history and environmental sciences and policy, although other programmes are planned. At the present time all studies are at the post-graduate level but these are planned to be extended to undergraduates as well. Students are recruited from what was the former Soviet empire, from countries as geographically separated as Albania and Macedonia in the south to Estonia in the north, from Hungary and the Czech Republic in the west to Kazakhstan and Kyrgyzstan in the east. The teaching staff, all leading experts in their own fields, are also recruited from the region but are supplemented by experts from Western Europe and the United States.

The CEU has three distinct components: the university proper (which also includes scholarship programmes), the research support scheme, and the higher education support programme. The environmental education programmes are mainly concerned with the first two of these, although it is increasingly involved with the third.

Environmental programme

It is now clear that environmental problems are a major issue in Central and Eastern Europe and the CIS. These problems require urgent attention and the groundswell of opinion among scientists and the public suggests that something must be done. It is also true that there is a grave shortage of trained environmentalists in those countries, so much so that it can sometimes be difficult for them to assemble their own environmental legislation and management strategies. The CEU environmental programme seeks to establish a sound basis for the development and implementation of environmental policy in the region:

- by combining the best and most up-to-date technology of the West with the indigenous strengths of the region;
- by emphasising the multidisciplinary nature of environmental science and policy by ensuring that the programme includes elements of biology, ecology, physical sciences, chemistry, engineering, economics, law and planning;
- by recognising that successful environmental policy and management must be based on transnational and international data and must

often be transnationally implemented. The programme aims to develop a network of CEU environmental graduates in universities, governments, NGOs and businesses throughout the region enabling the free exchange of information and experiences. Thus the programme will build up a facility in the region which can scarcely be matched in Western Europe.

Teaching programme

To date the department has organised a series of eight week-long summer programmes for about 60 students from the whole region. These programmes have followed the principles outlined above emphasising the multidisciplinary approach to solving environmental problems. Leading environmentalists from the region, Western Europe and North America contributed to a teaching, discussion, workshop and fieldwork programme. A wide range of topics are covered. Because of the wide range of backgrounds shown by the students, part of the programme is devoted to bringing the students to the same general level of environmental awareness before leading them into new topics and approaches. Special sections on GIS and EIA are used to integrate the numerous disciplines covered. Nearly 200 students with SOROS funding have completed this summer programme.

From 1994 the department intends to offer a one-year full masters programme in environmental science and policy. This course will be divided into two parts. The first is a taught part consisting of four units. The first of these is introductory, covering the broad spectrum of environmental subjects and emphasising the multidisciplinary nature of the subject.

The remaining three units specialise in environmental issues in the countryside, forestry and agriculture, problems in the urban environment and finally, environmental aspects of industrial activities. The taught part of the course will be largely based in Budapest using the existing facilities of the CEU but also utilising the new buildings being constructed which will be available soon.

The second part of the masters course consists of a research project lasting approximately five months. Students will be offered a wide range of projects covering both practical and theoretical topics. These will be carried out either in Budapest or any other country in the region. On completion the project must be written up and presented as a bound thesis.

A number of scholarships are offered by the CEU Environmental Sciences and Policy Department to scholars. Individual scholarships can be awarded to up to 30 students for a period not exceeding one year for research or work experience with leading scientific

and environmental institutions around the world. Also, up to 15 scholarships will be awarded for students to register for the University of Manchester (UK) environmental masters programme in pollution and environmental control. These scholarships are jointly funded by the UK Foreign and Commonwealth Office.

In addition to the masters programme, the department will run a number of short teaching and training programmes of one or two weeks' duration throughout the year in Budapest. These will be designed to bring together specialist post-graduates for conversion courses, to study new specialisms or techniques or to discuss new problem areas in the region.

Research programme

A variable number of environmental research support scheme awards are available for suitable projects suggested by scholars to be carried out in their own countries and in associa-

tion with their local institutions for periods up to two years. These awards enable students to put to good use the knowledge gained in the formal courses and to initiate research in their own countries in new environmentally related areas. One of the purposes of these awards is to encourage scholars to return and work in their own countries and to develop bonafide research programmes with their colleagues and their institutions.

The department is also involved in developing a number of research projects in its own right and in collaboration with other institutions both in the region and in the West. Areas of interest range from animal feedstuff production to novel ways of wastewater treatment. EIA, GIS and projects on environmental policy are also being developed.

The CEU is a unique concept in the region. Already the students who have passed through the environmental programme are securing positions in government, industry and universities in their own countries.

Exchange of information is taking place between them and a network has developed. This has spread beyond Central and Eastern Europe and includes many East-West links. What is extremely encouraging is that these links are persisting and even strengthening with time. Past students are continuing to use the CEU as a forum for the exchange of ideas and the discussion of problems in workshop and other meetings. It is this sort of continued contact that will truly produce "open societies" in the region. ■

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To teach teachers

Chris Oulton

The Association for Teacher Education in Europe (ATEE) is the leading organisation promoting collaboration, research and development for teacher education in Europe. Within the organisation there are 17 working groups, each focusing on a particular aspect of teacher education. Members of the working groups meet together at the annual ATEE conference. Each annual conference has a theme which is addressed through the main conference programme. In addition, a series of working group sessions are also scheduled.

The interdisciplinary working group on environmental education was formed in 1992. The purposes of the group are to:

- establish a regular forum for teacher educators with an active interest in environmental education;
- promote research on environmental education in the context of teacher education;
- promote publications in the field of environmental education;

- develop and strengthen links with existing networks, especially EC and UNEP projects;

- relate European environmental education issues to a global context;

- stimulate the development and implementation of curricula for both pre-service and in-service teacher education.

Individual and collective work

As the title "working group" suggests, these purposes are achieved through the activities and efforts of members both individually and collectively. The working group exists as an "umbrella" for these activities and, through the annual conference, provides an opportunity to meet together, share ideas and plan new activities.

To date, more than 100 teacher educators and researchers have registered their interest in the working group. In September 1993, over 30 people attended the working group sessions in Lisbon and 19 papers, on a wide range of environmental education topics,

were presented. A project, Environmental education into initial teacher education in Europe (EEITE), organised by members of the working group and funded by DG XI of the European Commission, was announced at the meeting. The next ATEE conference will be held in Prague on 4 to 9 September 1994. The theme for the main conference is "The teacher in a changing Europe: environmental education".

If you work in the field of environmental education and teacher education, your ideas and contributions are welcome. ■

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The Etna

In Italy

Giuseppe Spinelli

Our ability to solve ecological problems depends on our professionalism in managing the environment and the extent of our political and economic but also ethical knowledge and awareness of the issues involved. Today we must set our horizons on a new culture and reconsider our relationship with the environment: we must strive to integrate nature conservation into a harmonious approach to sustainable development. In practical terms, this means not only putting forward educational proposals to help disseminate an accurate perception of the value of the environment, but also shaping and reinforcing positive attitudes towards nature and even towards man, as one of its components. We must strive to change the motives behind the misconception of the relationship between human communities and the environment, and also conduct public awareness campaigns to elicit appropriate behaviour, with the help of educational programmes and tangible commitment on the part of individuals and institutions working in the education sector.

Although a theoretical approach is needed, we must also take account of practical experience, particularly of the project as a whole while at the same time respecting each individual and emphasising field work.

Intercultural action

The general aim of the Study Centre of Environmental Education for the Mediterranean Area is to encourage public awareness of the value of the environment and thus prompt intercultural action to foster positive attitudes to the environment and resource utilisation. In our view, this aim may be achieved through a new awareness of the problem, improved understanding of environmental processes and professionalism in the social, technical and economic fields. The Centre specifically strives to take stock of, coordinate, promote and disseminate throughout the Mediterranean Basin the optimum strategies, projects, methods, materials, instruments

and activities, and thus to become the ecological reference point for the area.

The Centre was officially inaugurated in spring 1990, and caters for all the Mediterranean peoples as interrelated members of a system, given that it is local people who will provide the driving force for the Centre. It is independent and non-profit-making. It has an extensive library and archives on the environment. It collects publications, studies and other materials which help propagate ideas for the proper use of the environment. It organises training courses for teachers, nature wardens and community development workers, producing the requisite material and using inexpensive means so that even countries with limited economic resources can reproduce the experiments carried out in the Centre. The Centre's main problems are obtaining visas for EEC countries, and covering travelling expenses for teachers from developing countries, accommodation expenses and the cost of converting a building which is to become the Centre's new headquarters.

The Centre has organised international study camps on environmental education for teachers in Calabria, France and Bulgaria; so far, 90 people from 13 different Mediterranean countries have attended. It is supported in these activities by the provincial authorities of Reggio di Calabria (Italy) and the EEC Tempus project. This year, two further international camps are planned, one in Slovenia on the preservation of wetlands and one in Calabria on the preservation of the sea.

The Centre is also carrying out research for public bodies on education in optimum waste disposal methods and the conservation of protected areas. The report on a course designed for nature guides, published by the Veneto Regional Forestry Office, sets forth the Centre's philosophical and methodological interpretation of environmental education.

Historical roots

We are only just beginning to reap the benefits of the endeavours, in the early Middle Ages, of the Egyptian Sultan Malik al-Kamil and the Emperor Frederick II, King of Sicily.

We hope to continue their work by encouraging nations to settle their conflicts through diplomacy and to construct a *Mediterranean Community*, which is proving increasingly necessary as a forum for encounters between the peoples of Europe, Asia and Africa. "After all, we may turn out to be brothers."

I am convinced that if this proposal were implemented it would advance the cause of peace. Although the Centre deliberately concentrates on environmental education, it is obvious that this idea cannot be confined to protecting the physico-chemical or biological aspects of the Mediterranean Basin: it also extends to culture. This is the framework within which a federation of all nations and peoples may, in time, establish that desirable concord based on mutual knowledge, respect, understanding, clemency, magnanimity and tolerance. For I believe that it is by being heedful of man and nature that we can move towards a better shared future. This is the hope which constitutes our strength and gives meaning to our lives. ■

G. Spinelli

Director

Study Centre of Environmental Education for the Mediterranean Area

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The Touch network

Milan Caha

Touch originated in Czechoslovakia in 1988 when a small group of the "Brontosaurus" movement decided to develop their interest in practical approaches to environmental education. They planned an unusual European environmental conference based on education through experience. They wanted to encourage participants to have direct experience with the real environment - to touch it. The success of this first conference in Sec has led to many follow-ups such as programme exchanges, scholarships, translations of materials and joint international projects.

Touch believes that environmental education at all levels will play a vital role in encouraging a more sustainable society.

What approach?

Touch encourages holistic environmental education through personal experience and interactive and co-operative learning. It is concerned with:

- the whole process of environmental education: raising awareness, developing skills, knowledge and understanding, clarifying attitudes and values and taking action *for* the environment;

- personal, community and global levels;
- theory as well as good practice;
- informal as well as formal sectors of education.

How is this achieved?

Through small friendly conferences, regional meetings, joint projects, networking.

There is *unity* of purpose in encouraging environmental education for sustainable living. There is *diversity* in terms of countries, backgrounds, professions, etc.

Guidelines

We believe that the Touch conference formula, small-scale in concept, with an emphasis on conviviality and sharing, is an invaluable vehicle for the promotion of environmental education across Europe.

- bring together a group from a broad range of backgrounds;
- make sure there is an equal number of men and women;
- keep the group small - up to 30 in number;

- make it a residential experience if possible;
- allow everybody to make an equal contribution;
- encourage mutual support;
- make it as experiential and participatory as possible;
- balance work with fun;
- allow no "gurus";
- use humour to generate warmth, trust and openness;
- generate joint projects and maintain contact after the event. ■

M. Caha

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Diversity within unity

Roy Williams

The research programme "Diversity within unity" is an attempt to bring into the process of environmental education some understanding of the political, social and cultural conditions that influence the environmental decision-making process at all levels of community living. It contains two important aims:

- to provide knowledge about the environmental state of Europe and to connect this with policy and decision-making at all levels of the community;
- to explore and examine the concept of care and protection of the environment as the means to unify for a common cause the diversity of Europe's peoples and their cultures but without diminishing their separate and different identities.

A source of collective knowledge

The range of rich diversity that Europe possesses in regard to the historical evolution of the human-environment relationship is a

source of collective knowledge that can be utilised by educators. Furthermore, the act of collaboration educators from different countries, as this project demonstrates, both widens and deepens our understanding not only of the nature and the causes of our present ecological predicament but also of the obstacles and constraints that obstruct the implementation of ameliorative action.

Essentially, the project established a network of educators from six countries who represented a broad regional division of Europe and who provided a set of case studies, both theoretical and practical, on approaches to environmental education that illustrate the principle and concepts adopted for the research programme. An additional element in the research programme was an evaluation of the contributions that history and ethnography are able to make to our environmental understanding. Because they share much in common, together they are able to provide the tools to interrogate the environment empirically and lay the groundwork for theories which capture and explain the processes of change in the environment. Such an analysis allows account to be taken of the socially, politically and culturally construct-

ed nature of the environment by recognising that its present state is the consequence of both previous and ongoing events and struggles within and between communities.

The report of the project, made to Directorate General XI of the EC and the Worldwide Fund for Nature (UK), fully documents the research programme and provides both a theoretical framework for the approach advocated as well as concrete examples of case studies that are informed by the principles and concepts which it espoused. ■

R. Williams

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Port-Cros

Philippe Robert

As one of France's seven national parks, Port-Cros has certain basic assignments to fulfil. We are required to protect the physical environment (land and sea), conduct scientific research for the purposes of management, and provide the public with information. The park's geographical location makes it particularly attractive to summer visitors and everyone with a liking for the sea, and we endeavour to return the compliment by going in for educative action on a grand scale.

Destination nature

Since 1980 we have been organising and developing the National Park's education potential while at the same time converting a 19th century fort, the Eminence, into an accommodation centre for parties of visitors. In 1990, a partnership contract was drawn up between the Park and the General Council of the Department of Var through the good offices of its educational arm, the *Office départemental d'éducation et de loisirs du Var (ODEL-Var)*. The Park's education centre now accommodates nearly 1,000 children every year in the period from early March to the end of November. The intake is

mainly local, but children also come from the whole of France and the rest of Europe.

Setting objectives

In response to demand from the teaching profession, our education service offers numerous facilities for discovering the environment in the traditional way, with the emphasis on the school curriculum. Knowledge and understanding are seen as twin prerequisites for learning to defend what one has been taught to appreciate.

Protected areas are magnificent teaching aids, and we see no reason why sites where nature is supreme should not be used in order to foster a complementary approach. Complementary, but with a different objective: to teach people to be moved by nature, feel passionately about it and, through understanding, come to love the natural world in its entirety and want to join forces with others working on a specific project. Such is the objective we have set ourselves at Port-Cros, as we look to the time when the whole of the natural world will be treated with respect.

An attractive method

Enjoyment and excitement are what keep people alert and active, especially children. The programmes offered at Port-Cros are varied and can be adjusted to the motivations of chil-

dren and teachers. One of these is "Sun Ship Earth", derived from the methods of the Institute for Earth Education.

This form of teaching, which originated in the USA 25 years ago, is practised today in nearly all countries of the world. It brings children into contact with nature in such a way that they can touch and feel it until a unique relationship develops. At the same time they are given practical experience of activities which teach them the basic concepts of ecology. Walks into the heart of the natural world alternate with notional and sensorial discovery sessions which are authentic moments of contact, immersion and pleasure. The children are confronted with photosynthesis, for example, in the world's most remarkable factory: a green leaf. Along a narrow footpath away from the main walking trail numerous surprises lie in wait: a tree that tells its life story, for example, or the sound of the dawn chorus ...

The delight which contact with nature brings, and the opportunity to learn more about the way life on earth functions, are bound to engender a new attitude towards the environment. ■

P. Robert
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First dive or immersion in the natural habitat



At the Council of Europe



Photography competition

The Council of Europe is launching a European photography competition open to amateurs and professionals alike with the theme: "Nature outside protected areas"

The aim is to capture the positive or harmful effects of human activity on nature, particularly in areas covered by European Nature Conservation Year (ENCY), which the Council of Europe has set for 1995: aquatic, forested, agricultural, urban, industrial, tourist and leisure, military, demilitarised, underground or close to major highways.

Entries must be in the form of colour prints of minimum size 13x18 cm or 18x18 cm with a maximum of three entries per person.

There is no entry fee, but photographs will not be returned.

Participants should indicate in capital letters on the back of each photograph:

- their surname, forename, address, telephone or (where possible) fax number, and country of origin;
- the title of the photograph and details of where it was taken, including geographical location.

The competition was launched in March 1994 and the deadline for entries is (post-mark) 26 September 1994.

Entries should be sent to:

Council of Europe Public Relations Service
"Photography competition"
F-67075 STRASBOURG-Cedex

An international jury of five professional photographers and two Council of Europe representatives will meet in October 1994 to select the best entries according to the criteria of technical quality, artistic merit and illustration of the chosen theme. The winners will be notified immediately.

The Council of Europe is offering 33 cash prizes, the first being 5,000 FF.

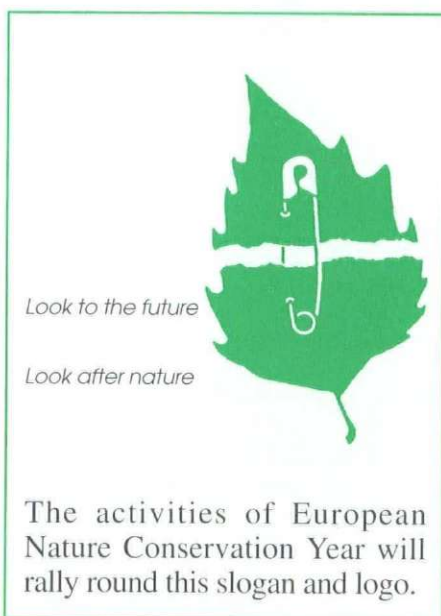
The best photographs will be used in printed material for ENCY 1995 (brochures, leaflets,

posters etc.). The Council of Europe Public Relations Service will contact prizewinners to obtain originals (negatives or slides) for a fixed period.

Prizewinners will grant reproduction rights free of charge to the Council of Europe and the National ENCY Organising Committees.

A Charter for the Danube

At its last session the Parliamentary Assembly considered a report on the preservation and development of the Danube basin. It adopted a resolution on the subject, in which it decided to prepare a European Danube basin charter, which would lay down the principles for permanent co-operation to be developed at intergovernmental



level in association with the elected representatives of the riparian states and regions.

This proposal, which could be the basis for the setting up of an International Danube Council, draws on the findings of the 2nd Inter-parliamentary Conference on the Environment: the Danube River Basin, held in Regensburg (Germany) at the invitation of Mr B Zierer, a member of the Parliamentary Assembly. In view of the changed geopolitical situation in Europe, the Danube basin could become the hub of a process of integrated development of the entire region, in the course of which its full potential (in the economic, tourism, transport and environmental fields) would be developed through concerted action by the riparian countries and regions.

The Danube is already the subject of programmes or legislative instruments dealing with specific matters, including two recent

draft conventions: the first, drawn up on the joint initiative of Austria and Hungary, is designed to ensure that the expected development of this region as a result of geopolitical changes does not endanger the environment and natural resources of the Danube basin. The convention is mainly environmental in scope.

The second draft convention is a German initiative which also involves the CSCE and the United Nations Economic Commission for Europe. This convention will be much broader in scope, as it is geared to reducing pollution in the Danube and protecting both surface and ground water. It also provides for the introduction of fairly stringent implementing procedures which will cover the 13 countries involved, ie an area of some 800 000 km².

The Parliamentary Assembly's aim is not to create a new structure but to set up an umbrella organisation reflecting the wishes of the governments, parliaments and local and regional authorities of the countries in question, which would be responsible for the overall management of the basin.

The Charter will be drawn up by the Parliamentary Assembly Committee on the Environment, Regional Planning and Local Authorities, which will organise the discussions on the various aspects in association with other Council of Europe bodies affected by the project.

One initial activity will be a seminar, organised in co-operation with the Standing Conference of Rectors, Presidents and Vice-Chancellors of European Universities, on legislation regarding the environment, regional planning and water management.

This seminar is to be held in Budapest in July 1994 and will be aimed at members of parliament in the riparian countries. It will also form part of the Parliamentary Assembly's programme of inter-parliamentary co-operation on legislative matters. ■

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