

PROSPECTS

quarterly review of
comparative education

ISSUE NUMBER ONE HUNDRED AND THIRTEEN
113

OPEN FILES

EDUCATION FOR SUSTAINABLE DEVELOPMENT

GUEST EDITOR:
GUSTAVO LÓPEZ OSPINA

EDUCATION FOR ALL

GUEST EDITOR:
SVEIN OSTTVEIT



INTERNATIONAL BUREAU OF EDUCATION

Vol. XXX, no. 1, March 2000

INTERNATIONAL BUREAU OF EDUCATION
PROSPECTS
quarterly review of comparative education

This journal is available in the following languages:

ARABIC

مستقبلات

المجلة الفصلية للتربية المقارنة

ISSN: 0254-119-X

CHINESE

教育展望

国际比较教育季刊

ISSN: 0254-8682

ENGLISH

PROSPECTS

quarterly review of comparative education

ISSN: 0033-1538

FRENCH

PERSPECTIVES

revue trimestrielle d'éducation comparée

ISSN: 0304-3045

RUSSIAN

перспективы

ежеквартальный журнал сравнительных исследований в области образования

ISSN: 0207-8953

SPANISH

PERSPECTIVAS

revista trimestral de educación comparada

ISSN: 0304-3053

The annual subscription rates for *Prospects* are printed on the order form at the end of this issue. Subscription requests for the different language editions can be:

- either sent to the national distributor of UNESCO publications in your country (see list at the end of this issue);
- or sent to Subscription Service, Jean De Lannoy, Avenue du Roi 202, 1190 Brussels, Belgium (see order form at the end of this issue).

ISSUE NUMBER ONE HUNDRED AND THIRTEEN

PROSPECTS

quarterly review of comparative education

Vol. XXX, no. 1, March 2000

VIEWPOINTS/CONTROVERSIES

- The culture of peace: a programme of action
*Federico Mayor
and David Adams* 3
- Peace education in a divided society:
creating a culture of peace in Northern Ireland
Terence Duffy 15

OPEN FILE: EDUCATION FOR SUSTAINABLE DEVELOPMENT

- Education for sustainable development:
a local and international challenge
Gustavo López-Ospina 31
- Towards education for a sustainable future
in Asia and in the Pacific
*John Fien,
Osamu Obe
and Bishnu Bhandari* 41
- Educational reform and sustainable development
in the Americas
Beatrice Edwards 57
- Educating for a sustainable future: Africa in action
Nathalie Barboza 71
- Managing European learning processes
towards sustainable development
Frits Hesselink 87

OPEN FILE: EDUCATION FOR ALL

- Ten years after Jomtien
Svein Osttveit 97
- Education, culture and indigenous rights:
the case of educational reform in Bolivia
*Sonia Comboni Salinas and
José Manuel Juárez Núñez* 105
- The literacy campaign in rural Morocco:
drawing some lessons
Mohamed Dardour 125

Authors are responsible for the choice and presentation of the facts contained in this publication and for the opinions expressed therein, which are not necessarily those of UNESCO-IBE and do not commit the Organization. The designations employed and the presentation of the material in *Prospects* do not imply the expression of any opinion whatsoever on the part of UNESCO-IBE concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

Please address all editorial correspondence to:
Editor, *Prospects*,
International Bureau of Education,
P.O. Box 199,
1211 Geneva 20,
Switzerland.

To find out more about the International Bureau of Education, its programmes, activities and publications, see the IBE's home page on the Internet :
<http://www.ibe.unesco.org>

All correspondence concerning subscriptions should be addressed to:
Jean De Lannoy, Avenue du Roi 202,
1190 Brussels, Belgium.
E-mail: jean.de.lannoy@infoboard.be
(See order form at the end of this volume.)

Published in 2000 by the
United Nations Educational,
Scientific and Cultural Organization,
7, place de Fontenoy, 75352 Paris 07 SP,
France.

Printed by SADAG, Bellegarde, France.

ISSN : 0033-1538

© UNESCO 2000

PROSPECTS

EDITORIAL BOARD

CHAIRMAN OF THE BOARD

Jacques Hallak

MEMBERS

Cesar Birzea

Norberto Bottani

Mark Bray

Lawrence D. Carrington

Elie Jouen

Kenneth King

P.T.M. Marope

Mamadou Ndoeye

Fernando Reimers

Bikas C. Sanyal

Juan Carlos Tedesco

Buddy J. Wentworth

Yassen N. Zassoursky

Muju Zhu

EDITORIAL TEAM

TECHNICAL EDITOR: John Fox

ASSISTANT EDITOR: Nadia Sikorsky

EDITORIAL ASSISTANT: Brigitte Deluermoz

ENGLISH EDITORIAL TEAM:
Graham Grayston, Kerstin Hoffman

FRENCH EDITORIAL TEAM:
Guy-Claude Balmir, Françoise Bouillé,
Claudia Querner-Cysne

SPANISH EDITORIAL TEAM:
José-María Domínguez-Luengo

VIEWPOINTS/CONTROVERSIES

THE CULTURE OF PEACE: A PROGRAMME OF ACTION

Federico Mayor and David Adams

The United Nations General Assembly, on the final day of its fifty-third session, 13 September 1999, adopted a remarkable document—a Declaration and Programme of Action on a Culture of Peace (Resolution A/53/243). This document can serve as a blueprint for the twenty-first century to accomplish what has been only a dream in previous centuries, namely to make the transition from the culture of war and violence to a culture of peace and non-violence. This was the dream of the League of Nations, and later of the United Nations, founded to ‘save succeeding genera-

Original language: English

Federico Mayor (Spain)

Currently Professor at the Centre of Molecular Biology, Autonomous University of Madrid. Former Director-General of UNESCO, 1987–99. Former Rector of the University of Granada, (1968–72), Chairman of the Spanish Society of Biochemistry (1970–74), Member of Spanish Parliament and Chairman of the Parliamentary Commission for Education and Science (1977–78), Spanish Minister for Education and Science (1981–82), Director of the Institute of the Sciences of Man, Madrid (1983–87), Member of the European Parliament (1987). Member and founding member of numerous national and international academies and scientific societies. Author and editor of many publications, the most recent of which include *Action for human rights in the twenty-first century* (1998) and *Letters to future generations* (1999).

David Adams (United States of America)

Ph.D. Director of the Unit for the International Year for the Culture of Peace at UNESCO. Following a career as Professor of Psychology at Wesleyan University and Yale University (United States), he joined UNESCO in 1993 as a consultant to develop the Culture of Peace Programme. He had been a specialist on aggressive behaviour, the evolution of war and the psychology of peace activists, and he helped to develop and publicize the Seville Statement on Violence. He is the author of several books and many publications in neurophysiology, cardiovascular physiology, genetics, ethology, biopsychology, social psychology, cross-cultural anthropology, history and ethics. A number of these studies have helped lay the scientific basis for a culture of peace.

tions from the scourge of war'. And it was the dream of UNESCO, whose Constitution begins with the statement that 'since wars begin in the minds of men, it is in the minds of men that the defences of peace must be constructed'. It goes on to point out that 'a peace based exclusively upon the political and economic arrangements of governments would not be a peace which could secure the unanimous, lasting and sincere support of the peoples of the world'. 'Peace must therefore be founded, if it is not to fail, upon the intellectual and moral solidarity of mankind.'

If we take these words to heart, we realize that in order to achieve peace we must go deeper than we previously thought possible. We must address the cultural roots of war and violence and transform our values, attitudes and everyday behaviours into those of a new culture, a culture in which power is based on reason and dialogue, not on violence, whether overt or structural. This is a transformation that requires the involvement of every person, every family, every teacher and every institution in the world. It is without precedent in human history.

It is certainly radical, even revolutionary. And yet we have no choice. Looking back at the twentieth century, we see that war has become an overwhelming and unacceptable risk to life on earth. It is not without reason that Einstein was considered the most influential person of his time. It was the atomic bomb, for which he provided a scientific foundation, that led the transformation of war. War is no longer a matter of contending armies on a battlefield. It has become a matter of remote-controlled missiles even traversing outer space, of victims who are primarily the most helpless—children, women, the elderly—and, ultimately, of the potential destruction of the planet.

In presenting the resolution on a culture of peace to the General Assembly, Ambassador Anwarul Karim Chowdhury of Bangladesh spoke of it as a 'legacy that will endure for generations'. He described it as a document that is 'unique in more than one way. It is a universal document in the real sense, transcending boundaries, cultures, societies and nations.' It is action-oriented. It brings together actors at all levels, 'states, international organizations, civil society, community leaders, parents, teachers, artists, professors, journalists, humanitarian workers—in a way, all people from all walks of life and all sorts of backgrounds can contribute to its implementation'.

We consider it a great journey on which we have embarked, and which can lead us to a civilization that is much more humane, just, democratic and sustainable.

A programme of action

The Programme of Action adopted by the General Assembly provides a road map for our journey, with frequent milestones along the way. It contains the following sixteen points.

1. *The Programme of Action should serve as the basis for the International Year for the Culture of Peace and the International Decade for a Culture of Peace and Non-violence for the Children of the World.*

Every journey begins with a single step. The first such step was taken by the United Nations General Assembly in November 1997 when it declared the Year 2000 as

the International Year for the Culture of Peace and requested UNESCO to serve as the focal point for its mobilization. As described in the document proposing the International Year for the Culture of Peace, its object is to ‘mobilize public opinion at the national and international levels for the purpose of establishing and promoting a culture of peace’. A second step was taken one year later when the years 2001—2010 were declared as the International Decade for a Culture of Peace and Non-violence for the Children of the World, an initiative that was proposed by all the Nobel Peace Prize laureates acting in concert.

To mobilize public opinion, a number of those laureates have developed a short document called the Manifesto 2000 (see Box 1). Unlike petitions, the Manifesto 2000 does not appeal to a higher power, but commits the individual to practise a culture of peace in everyday life. During the International Year it is being distributed and signed by individuals throughout the world, with the goal of presenting 100 million signatures to the Millennium Assembly of the United Nations. This would, in effect, say to the assembled Heads of State: ‘we the peoples of the world are committed to a culture of peace in our everyday lives; we call upon you to follow these principles in the relations among States as well’. It returns us to the origins of the United Nations itself, whose Charter begins with the words ‘We the peoples of the United Nations’.

In fact, more than fifty Heads of State have already signed or stated their adherence to the Manifesto. One country has already gathered one million signatures. Most appropriately, that country is Algeria, where the people have taken up the Manifesto as a statement of hope for a future of peace.

2. *Member States are encouraged to take actions for promoting a culture of peace at the national level as well as at the regional and international levels.*

The Member States are already deeply involved with the culture of peace. In the general debate at the recent General Conference of UNESCO over 100 countries expressed their commitment. And on the day the International Year for the Culture of Peace was launched—14 September 1999—over 100 countries held events to mark its launching (details are available at the website www.unesco.org/iycp). The National Commissions for UNESCO in each country and Field Offices of UNESCO in each region are being involved as National Focal Points for the International Year to mobilize the whole of society in their countries and their regions. Many countries have established national programmes for a culture of peace, the largest one being that of the Russian Federation.

3. *Civil society should be involved at the local, regional and national levels to widen the scope of activities on a culture of peace.*

As mentioned by Ambassador Chowdhury to the General Assembly, the strength of the culture of peace is that it brings together actors at all levels from all walks of life and all sorts of backgrounds. As he said, when describing this process to a meeting at UNESCO, it can be a ‘grand alliance’ of everybody working in different but related fields pertaining to a culture of peace.

BOX 1. Manifesto 2000

Manifesto 2000
For a Culture of Peace and Non-Violence

Recognizing my share of responsibility for the future of humanity, especially for today's children and those of future generations, I pledge in my daily life, in my family, my work, my community, my country and my region-to:

Respect all life

Respect the life and dignity of each human being without discrimination or prejudice;

Reject violence

Practise active non-violence, rejecting violence in all its forms: physical, sexual, psychological, economic and social, in particular towards the most deprived and vulnerable, such as children and adolescents;

Share with others

Share my time and material resources in a spirit of generosity so as to put an end to exclusion, injustice and political and economic oppression;

Listen to understand

Defend freedom of expression and cultural diversity, giving preference always to dialogue and listening without engaging in fanaticism, defamation and the rejection of others;

Preserve the planet

Promote consumer behaviour that is responsible and development practices that respect all forms of life and preserve the balance of nature on the planet;

Rediscover solidarity

Contribute to the development of my community, with the full participation of women and respect for democratic principles, in order to create together new forms of solidarity.

[To sign the Manifesto by Internet or to obtain more information about it, use the address <http://www.unesco.org/manifesto2000>.]

The mobilization for the International Year is already putting this into practice. On an international level, the non-governmental organizations associated with UNESCO (341 at the last count) are signing agreements to disseminate the Manifesto 2000 and to hold flagship events during the International Year. Over 6,000 uni-

versity rectors and over 1,000 city mayors have been contacted to undertake the same activities, and many are already engaged in them. The greatest mobilization is on a national level, where non-governmental organizations, schools, universities, enterprises, cities and national parliaments are working with the National Focal Point in each country to involve their members and citizens in the actions of the Year. It is expected that these partnerships will be enlarged and strengthened during the course of the International Decade for a Culture of Peace and Non-violence for the Children of the World.

4. *The United Nations system should strengthen its ongoing efforts promoting a culture of peace.*

The Programme of Action on a Culture of Peace was developed with input from many of the United Nations programmes and specialized agencies, and it is expected that a results-based management system will be adopted by the coordinating organ, the Administrative Committee of Coordination, for the various actions to be undertaken in support of this Programme. As will be seen below, each agency has much to contribute to its implementation.

Already, in terms of the International Year for the Culture of Peace, there is a commitment at the level of the Administrative Committee of Coordination for the mobilization of the various agencies. And at a country level, all the Resident Coordinators of the United Nations system have received copies of the Manual for National Focal Points, inviting them to take part in the process of national mobilization for the Year.

5. *The United Nations Educational, Scientific and Cultural Organization should continue to play its important role in and make major contributions to the promotion of a culture of peace.*

It is to the credit of UNESCO, and it is firmly within its mandate, that the Organization has taken a leadership role in the UN system with regard to a culture of peace. This role was initiated at the 28th UNESCO General Conference in 1995, which declared that 'the major challenge at the close of the twentieth century is to begin the transition from a culture of war to a culture of peace' and which placed the culture of peace at the centre of its six-year Medium-Term Strategy.

The concept of a culture of peace had been developed since 1992 at UNESCO in terms of the Organization's response to 'An Agenda for Peace' of the United Nations Security Council. The concept had first been proposed in the Declaration of Yamoussoukro (Côte d'Ivoire) in 1989. Reasoning that peace-keeping operations alone could ensure the absence of war but not bring a positive, dynamic peace, UNESCO argued that this could be done best by engaging in common ventures of human development those who had been in conflict. Acting primarily in the fields of education, science, culture and communication, UNESCO offered its services in such 'post-conflict peace-building'. Projects were undertaken in a number of coun-

tries in Central America and Africa, as well as in collaboration with the Government of the Philippines, the most extensive project being in El Salvador. A comprehensive overview of the culture of peace at this early stage is contained in the monograph *UNESCO and a culture of peace: promoting a global movement* (1995).

6. *Partnerships between and among the various actors as set out in the Declaration should be encouraged and strengthened for a global movement for a culture of peace.*

This point of action is perhaps the most important in the document. For the first time, the United Nations calls for a 'global movement' and it indicates clearly that this should be achieved through a process of partnerships.

Whereas peace is primarily the business of States and international organizations, the culture of peace can be achieved only by a 'movement' involving people at all levels and in all corners of the world, including the non-governmental actors of civil society—a 'grand alliance' as described above.

The formulation of the culture of peace is deliberately broad in order to include the goals of the full range of organizations working for peace and justice. These goals include human rights, sustainable development, democratic participation and equality of women, as well as disarmament and non-violent means for social change. In other words, we may see that people everywhere are already working for a culture of peace; they just do not call it by that name. This is especially true for most non-governmental organizations: unlike the State, which can resort to force of arms, they can gain adherents only by the force of their argument, i.e. through the principles of a culture of peace.

Because of its fundamental principle that it must not seek or accept the image of an enemy, the culture of peace must be different from most of the great social movements of the past. It must create no scapegoats, single out no individuals or peoples to be destroyed, glorify no partisan group. Being global in scope, it must base itself on the universality of values—the inalienable right of every human being to a life of peace and non-violence. It must not oppose the State and its institutions, but transform them through democratic means. Even military institutions should not be seen as the enemy, but efforts should be made to transform their practices by non-violent means from force to peace-keeping.

The key to a global movement is its universality. The fact that the culture of peace has been adopted by consensus by the Member States of the United Nations is essential. So, too, is the universality of the Manifesto 2000, which provides a shared set of values to which individuals everywhere in the world can make a personal commitment.

Each engaged individual is invited to take action within the framework of existing initiatives that are linked together in a growing number of partnerships for the International Year for the Culture of Peace. This is the beginning of a long journey that will be carried further by the International Decade for a Culture of Peace and Non-violence for the Children of the World.

7. *A culture of peace could be promoted through sharing of information among actors on their initiatives in this regard.*

Essentially, a social movement is a process of consciousness development at a collective level. It is above all a psychological phenomenon, an attitude, a feeling. It comes about through the sharing of information, so that you realize that you are not alone, but part of a large number of people making the same journey.

Of course, it is important to use all the means of information exchange that are available in order to provide news of the movement. The mass media are mobilizing and passing on the message of the International Year for the Culture of Peace in many regions of the world. A dramatic 45-second television spot featuring Nobel Peace Prize laureates is especially effective and is being seen by millions of people. Radio spots, newspaper advertisements and articles, magazine articles and Internet sites are carrying news of the movement for a culture of peace.

But a movement requires more than information; it needs active participation, or, to quote the Programme of Action (see below), it requires 'participatory communication'. Fortunately, we now have a new and remarkably effective means for participatory communication thanks to the development of the Internet. In this regard, two interactive systems are being developed on the Internet within the framework of the International Year for the Culture of Peace. The first, based on UNESCO's experience with the Planet Society network, will provide a global 'marketplace' for the thousands of grass-roots projects working on all aspects of a culture of peace. It will provide basic information not only on what they are doing, but also on what they have to offer to others and what they need from others. The second, called the Culture of Peace News Network, is a developing network of independent Internet sites that provide a global and multilingual news service of events and media productions that promote a culture of peace. Each visitor to the Culture of News Network will be invited to provide the news report, and it will be edited by trained 'Culture of Peace Moderators' who volunteer a few hours a week to edit the reports so that they conform to simple 'culture of peace' rules.

8. *Effective implementation of the Programme of Action requires mobilization of resources, including financial resources, by interested governments, organizations and individuals.*

Obviously, the development of a movement requires resources. Considerable resources have been devoted to the culture of peace by UNESCO and its Member States. The various non-governmental organizations that have undertaken partnerships for the International Year for the Culture of Peace are committing their own resources to this effort. Foundations are taking up the cause. Resources are committed on a basis of equal partnership, rather than in a paradigm of donor and dependent, and this, of course, is fitting for the development of a social movement. At the same time, the resources are still far from adequate. As we have often said, we must learn to pay the price of peace, even as we have, in the past, paid the price of war.

9. *Actions fostering a culture of peace through education*

It is fitting that the first type of action to be singled out in the Programme of Action is that of education, which is the key to a culture of peace. Not just technical education, but, in the words of the Delors Commission on Education for the Twenty-first Century, the learning of how to live together. People need to be empowered at all levels—in schools, in adult education, in non-formal education—with the skills of dialogue, mediation, conflict transformation, consensus-building, co-operation and non-violent social change.

As expressed by the resolution, this process must begin on the basis of a reinvigoration of national efforts and international co-operation to promote the goals of education for all. The success of the Conference on Education for All, convened by the World Bank, UNDP, UNICEF, UNFPA and UNESCO, taking place in April 2000 in Dakar, is therefore crucial to progress towards a culture of peace.

Teachers are the key and, therefore, we are especially pleased to see the leadership being assumed by Education International. This international non-governmental organization is sending out a kit for the International Year for the Culture of Peace to all of its affiliated teachers' unions, representing 23 million members throughout the world. As its leaders told UNESCO, the Manifesto 2000 was in their view simply a restatement of the rules of every good classroom in the world: respect others, reject violence, share, listen in order to understand, etc.

Higher education is also essential. Here, reference is made to the Programme of Action of the United Nations University, the University for Peace in Costa Rica, and the UNITWIN Chairs Programme of UNESCO. In this regard, the agreement reached among these organizations in 1999 to rejuvenate the University of Peace establishes as its highest priority the promotion of a culture of peace.

10. *Actions to promote sustainable economic and social development*

The Programme of Action provides concrete proposals for sustainable economic and social development. As the world has become increasingly interdependent, we have come to learn that we can only gain from the development of others and suffer from their impoverishment. This is a major change in the concept of economic growth, which in the past could be considered to profit from military supremacy and structural violence and benefit at the expense of those who were vanquished and weak. As declared by the World Summit for Social Development in Copenhagen, social development, social justice and the eradication of poverty are indispensable for peace.

The movement for sustainable development has become a great force in the world, and it is important that the movement for a culture of peace is linked to it. There is a lesson for us here, because we remember less than a decade ago when it was a concept no better known than the culture of peace. Thanks to the Rio

Conference on Environment and Development in 1992 and the follow-up since then, it has been recognized and has stimulated actions throughout the world. This can be a model for the development of an even broader movement for the culture of peace, of which sustainable development is one component.

11. Actions to promote respect for all human rights

The United Nations General Assembly has very properly included this as a key point of the Programme of Action on a Culture of Peace. The development of respect for all human rights, since the Universal Declaration of Human Rights was first formulated by UNESCO in 1948, is another milestone and precedent for the development of the movement for a culture of peace. Rights have been recognized since the beginning of human history, but it is only now that we recognize their universality. It is not only the clan or the rich or the European or the educated or the males or the adults who have rights. It is everyone, rich and poor, educated or non-educated, men and women, adults and children. We are all part of one global family. And it must be clear that this applies to all human rights, including not only political rights but also economic and social ones.

Despite the opposition of certain countries and regions, we continue to believe that we should struggle to ensure the basic human rights to development and to peace. After a vigorous debate in the United Nations, the first of these rights was retained in the Programme of Action and the second was omitted.

12. Actions to ensure equality between women and men

From the very beginning of recorded history, the culture of war has been associated with male domination. It has always been the men who make the decisions about war and peace and who gain power from their careers as warriors. And in prehistory the precursors of education can be found in the rites of passage from boyhood to warrior. In making the equality of women and men one of the key actions of its Programme of Action on a Culture of Peace, the General Assembly made a linkage of great importance. On the one hand, it is only through the replacement of a culture of war that women can be freed from its dominating effects. As recognized by the Fourth World Conference on Women in Beijing, equality, development and peace are inextricably linked. And on the other hand, by enlisting the women of the world in the struggle for a culture of peace, one mobilizes what can be perhaps the most powerful force in the world for social change.

Here, too, it is important to make the linkage between peace, equality, education and development. As the Programme of Action points out in its section on education, it is necessary to 'ensure equality of access for women, especially girls, to education'. And, as it points out in its section on development, 'integrating a gender perspective and empowering women and girls should be an integral part of the development process'.

13. Actions to foster democratic participation

The General Assembly resolution correctly places the emphasis here on participation, and in the text that follows, it underlines the importance of 'democratic principles and practices'. This is important, for we must not fall into the trap of seeing democracy as no more than a set of procedures and forms such as secret-ballot elections and multi-party systems. Democratic participation, to be effective, must engage everyone at all levels of society, involve all types of decision-making, and be an everyday practice, not just a once-a-year event.

In fact, democratic participation is essential for a culture of peace. It is the only alternative to the authoritarian aspect of a culture of war, an aspect that has been created by, and has at the same time sustained, the culture of war. As has been said, 'what if they called for a war and no one responded?'

14. Actions to advance understanding, tolerance and solidarity

There has never been a war without an 'enemy'. To abolish war, we must preclude the development of enemy images through the consistent and universal practice of understanding, tolerance and solidarity. In this sense, the culture of peace may be said to be a 'subversive' enterprise: it undermines the capacity of nations to go to war by depriving them of the argument that they must defend themselves against an enemy. One is reminded of the words of Mikhail Gorbachev, who at the end of the Cold War warned the Western leaders that he was going to deprive them of an enemy by making peace with them.

There are many actions recommended in the General Assembly resolution. One of the most effective is contained in the section on education and concerns textbook revision that is carried out on a regional basis, so that those who have been enemies in the past can arrive at common approaches for the teaching of history. A recent and highly successful conference on this matter (Visby, Sweden, September 1999) was appropriately called 'disarming history'.

15. Actions to support participatory communication and the free flow of information and knowledge

We are convinced that the technological revolution that has brought us global systems of communication and increasingly interactive capabilities is one of the reasons that we can now take seriously, for the first time in history, the abolition of war and the establishment of a culture of peace. Communication is a source of power, and increasingly it is in the hands of the many rather than the few.

We are not convinced, however, that this is an inevitable process. There are forces that seek to control communication and restrict its universal access and its contents. Hence, the General Assembly quite rightly places emphasis on the free flow of information and knowledge and on the full participation of people in the com-

munication process as a key element of the culture of peace. We must ensure that the new technologies are accessible to all. For example, every school in the world can be hooked up to the Internet via cheap, 'disposable' computers that are solar-powered and connected by satellite rather than telephone. This is no longer a technological question; it is simply a political one. It is not only the students who will gain from access to the world's knowledge and to the world's peoples: the teachers too will be given powerful new tools, and the entire education process will become more relevant to society as a whole.

Of course, it is not only access to the information superhighway that is important, but also the contents of that highway. And here we come back to the importance of initiatives such as those mentioned earlier, by which people are enabled to participate in the generation and sharing of information on the development of a culture of peace.

16. Actions to promote international peace and security

It is fitting that the last item on the list of actions includes disarmament, military conversion, confidence-building, demobilization and reintegration of former combatants, and concern with the impact of sanctions, issues that are normally the first ones to be considered as the concern of the United Nations and the Member States. Of course, these are important and continue to be the goals of the system. However, in this context it is recognized that they come not as a prerequisite step, but as the culmination of a process that privileges education, development, democracy, culture and communication. In other words, the way to peace is through a culture of peace.

In conclusion, we believe that Ambassador Chowdhury was right when he said that the Declaration and Programme of Action on a Culture of Peace represents a 'legacy that will endure for generations'. It charts a course for us as we seek a new way of living together in the twenty-first century.

VIEWPOINTS/CONTROVERSIES

PEACE EDUCATION IN
A DIVIDED SOCIETY:
CREATING A CULTURE OF PEACE
IN NORTHERN IRELAND

Terence Duffy

Introduction

Northern Ireland, with its reputation for perpetual political violence and entrenched sectarianism, might appear a difficult terrain for those wishing to fashion a 'culture of peace', even among the younger generation of citizens in this divided province. However, peace education has proved both a flexible and hardy concept in the curriculum of Northern Ireland schools. From the days of 'foreboding' which marked the immediate pre-1968 years, with sectarian tensions turning to political violence, the schools system has endeavoured to respond to the worsening political problems of the wider society. In an intensely sectarian milieu, educational institutions had evolved in Northern Ireland that reflected the religious divisions of that society (Akenson, 1973). Then in 1968, as 'the top blew off' and civil society disintegrat-

Original language: English

Terence Duffy (United Kingdom and Ireland)

A member of the Division of Politics and International Studies at the University of Ulster, Magee College. Has published widely in the field of peace education in divided societies and his most recent publications include studies of the peace movement in Northern Ireland, and of the 'democratic process' in Cambodia and Bosnia and Herzegovina. In recent years, he has worked closely with UNESCO and other United Nations agencies in the broad field of education for human rights, democracy and peace.

ed into political anarchy, the schools were faced with a new and unprecedented challenge. Could they respond effectively to the task of educational provision in a politically violent environment? What followed was a mixture of success and failure, but there can be little question that Northern Ireland schools offer a compelling example of the problems facing educationalists in a highly divided society.

This paper explores the issue of peace education in Northern Ireland in its broadest sense. Therefore it looks not merely at peace education *per se* but also at the sectarian context of schooling and at the impressive variety of anti-sectarian initiatives which have been tried in Northern Ireland since the late 1960s. It will argue that, faced with formidable obstacles pertaining to the divisions in civil society, these efforts constitute a genuine attempt to promote a culture of peace among the school-children and young adults of Northern Ireland.

There can be little doubt that some of the first efforts towards forging such a culture of peace were both piecemeal and lacking in co-ordination. Certainly, the earliest peace education projects were *ad hoc* initiatives pioneered by individual schools or churches. The latter certainly made interesting contributions to the enhancement of inter-community relationships at the local level (Morrow et al., 1991). Individual church leaders also expressed an interest in education as a panacea for the sectarian turmoil that was rapidly enveloping the province. Regrettably, little came from these isolated efforts. In the schools system, a number of concerned teachers sought to experiment with a civics curriculum which was at best stale and at worst a mere duplication of exercises purloined from English schools. These materials proved entirely unsuitable, and it was clear that any efforts at peace education required a curriculum that genuinely responded to the needs of Northern Ireland (Fahey, 1978). The product of group or individual enterprise in both 'controlled' and Catholic schools, these early programmes also lacked the authority of formal State support.

In more recent years there have been several large-scale peace education ventures in Northern Ireland reflecting the statutory responsibility of the education and training agencies in the promotion of peace (Donnelly, 1998). These efforts have occurred at a variety of levels (none of them mutually exclusive), but the principal venues have been the schools, youth and community agencies, and the higher education and adult education sectors. The schemes pioneered by these diverse organizations have ranged from holiday projects involving groups of Catholic and Protestant children, study courses in history and politics, to various types of cross-community contact arrangements in a variety of institutional and non-institutional settings. The result has been a mixture of 'success and failure', but the dynamic of constructive work for peace education has been well established across many aspects of Northern Ireland's education system.

There has also been innovative programming in peace education in the community sector. Particularly interesting here is the work of the Community Relations Council (CRC), which has projects in the areas of reconciliation and community skills training. The CRC was established in January 1990 as an independent organization (with substantial government funding) and charged with the task of promoting better community relations and the recognition of cultural diversity. This

has included promoting community education, and a wide range of activities and educational programmes have been conducted with encouraging levels of cross-community support among the general public. A strong feature of the CRC's programming has been the issue of cultural diversity, and its implications for challenging sectarian stereotypes in Northern Ireland.

The single largest sector of innovation (not surprisingly) has been that mandated by the relevant government department. In recent years the Department of Education in Northern Ireland has developed the concept of Education for Mutual Understanding (EMU) as a basic strategy for encouraging appreciation of the province's divided heritage. The possibilities as well as the problems of implementation of many of these ideas are the primary subjects of this brief paper. In terms of organization, the paper will first address the segregated nature of Northern Ireland society and its schools. This will lead into a treatment of the problems of developing peace education in a divided society and of measuring the effectiveness of recent peace initiatives. Consideration is also given to the issues of tolerance and 'contact' in influencing curricular innovation. Finally, an effort will be made to assess the future prospects of peace education in Northern Ireland in the somewhat more optimistic times since the signing of the Good Friday Agreement.

Segregation and the Northern Ireland schools system

Although everyday life for the vast majority of people in Northern Ireland is not characterized by exposure to political violence, there are profound divisions that separate the Protestant and Catholic sections of the community and that limit the 'contact' they enjoy (Duffy, 1993). Northern Ireland is a deeply divided society, in which most Protestants and Catholics live in segregated neighbourhoods, use separate local facilities and go to different schools. Thus, in Northern Ireland, the inter-relationship between political, social and religious life has ensured deeply rooted links between the schools and education (Murray, 1985). As a direct consequence of this, the majority of schools are denominationally exclusive so that there is little crossing of the Protestant—Catholic divide during the school day (Dunn, 1989). The basic structural underpinning of this segregated school system is the separation between controlled schools (predominantly attended by Protestants) and maintained schools (attended mainly by Catholics). Controlled schools, under the management of local education authorities, are totally funded for capital and recurrent expenditure by the State. In this system, while the Board of Governors has to be 'publicly representative', ministers of the larger Protestant churches have statutory membership, thus endorsing a strong tie with Protestantism. Likewise, the maintained schools are directly managed by the Catholic Church, but for this greater degree of working autonomy, Catholic dioceses contribute 15% of the total capital expenditure.

The evolution of this system lies in the segregated and politically bifurcated nature of Northern Irish society. The schools, therefore, are a reflection of the major historical *cum* political divisions in that society. There has been little evidence (even

in recent years) of a 'strong will' on 'either side' for a radical departure in the structure of schooling in the province. Admittedly, since the outbreak of the current conflict in the late 1960s there has been much discussion as to the desirability of mixed schools. Indeed, in the 1970s groups such as All Children Together began to advocate a policy of integrated education. In many respects, their goal was the creation of a neutral educational environment where contact among young people could be fostered in the most natural of circumstances. Following on from these demands (and reflecting changes in Northern Irish society) the integrated schools movement has grown so that there are currently approximately twenty integrated schools. In response to these trends, 1997 legislation facilitates the development of integrated schools and 'places a statutory responsibility on the Department of Education to encourage integrated education'. This has been an encouraging practical step, and constitutes a significant indication of governmental support for mixed schools.

Starting from an ambiguous and unenviable position, outside the State system and with no government funding, integrated schools now receive substantial capital funding from the State, and continue to increase in number. Although it is numerically small in proportion to the total number of schools in Northern Ireland, the fact that the integrated schools movement is increasing is interpreted as a signal of wider changes in Northern Ireland society. However, it would not be accurate to read too much into this apparent change in the structure of Northern Ireland schooling. In the first instance, many integrated schools have experienced a problem in establishing a genuine balance between Catholic and Protestant pupils, as they struggle with the segregated nature of the province's residential communities. If the catchment areas are religiously divided—as most are in Northern Ireland—it is difficult to find a reasonable balance of the two sections of the community. Moreover, many critics point to the mainly middle-class nature of the integrated schools movement. There is a sense in which these schools are dealing with 'the converted'—families who probably already have a good deal of cross-community contact. It is doubtful as to how far integrated schools have impacted on the wider pattern of life in Northern Ireland, which is much more intensely divided. It is against this formidable reality that the goal of creating a culture of peace must ultimately be assessed.

Examples of innovation in peace education

There have been a number of stimulating examples of anti-sectarian work in school classrooms and also in adult education centres in the province. In peace education work in a divided society like Northern Ireland, one must be aware that existing curricula represent a selection made from the broader culture in which they are set. Since much of the curricula in Northern Ireland has reflected the loyalties of divided communities, peace education has to fight an uphill struggle against the prejudices of the education system. Moreover, as the way a curriculum is delivered by the providing agencies has as much impact on learners as the written curriculum itself, the praxis of the educator/trainer is critical in this process. Therefore, in any review of curriculum in such a divided society it is clear that the agencies will wish

to reflect on the condition of current practice and explore new approaches that may permit innovation in peace education (Stradling et al., 1984). This basic principle has coloured much of the early research on peace education in the province. Seen positively, there has indeed been genuine reflection, and there exists goodwill at many levels for changes in the education system that might facilitate cross-community work.

Such evaluation has proved useful for educational planning in Northern Ireland. There are certainly a wide range of curricular approaches that might prove valuable in generating an increased understanding of peace education and which may equip educators with the cognitive and effective skills to design, implement and defend peace education in the curricula of a range of constrained settings. Of particular note has been the analysis of curriculum development strategies (Rogers, 1991). Certainly teachers working in this field should develop a critical analysis of their educational practice. This will assist them in identifying and challenging elements of peace education, and in constructing a defensible 'peace curriculum' which can be robustly defended against public criticisms and competition from other (perhaps academically better established) subjects. One must also be conscious of the presence of some of the allegedly 'negative' aspects of peace education. Cynics maintain that peace education presents degrees of indoctrination in its tempting message of education for peace. Peace educators are often accused of being agents of the government—trying to 'make people more peaceable'. Be that as it may, the key concepts of any peace curricula—peace and democracy, co-operation and justice, tolerance and mutual understanding, identity and equality—have integral and critical import. In essence, this is a model of citizenship education that seeks to foster and sustain cross-community contact (Crick, 1998). Such basic values are central to the concerns of peace education in a politically hostile environment. They are also the building blocks of the struggle for a durable model of peace education for Northern Ireland.

New models of peace education in the curriculum

It would not be overstating the case to say that peace education has had a good many proponents since it first became commonplace during the early years of the Northern Ireland 'troubles'. Northern Ireland has also had a number of formal, State-run peace education initiatives in recent years. The driving forces behind these ventures have been multifarious. Some have been the product of educational innovation within the universities (and put into practice, in pilot form, in schools), such as the Schools Cultural Studies Project of the early 1970s. This was an impressive pre-EMU initiative that sought to build on the civics curriculum that had previously been widely used in Northern Ireland schools. It was influenced by the academic environment, which spawned it, but it was truly an innovative effort to create a 'civics education' for a divided society. It worked well in a number of pilot schools in the 1970s, but never made the 'grand plan' of the wider school system.

Other innovations have followed State directives, such as the comprehensive EMU programme implemented by the Department of Education for Northern Ireland as a policy directive from the mid-1980s (Robinson, 1987). EMU is now firmly embedded in all aspects of the schools system and has done much to establish the ideal of cross-community contact. The EMU programme was purposively designed to inject thinking about EMU into every sector of the curriculum. Seen as a 'full-blown' policy, EMU could certainly contribute to the creation of a genuine culture of peace if the goals and objectives of cross-community contact and student exchanges can be carried to their logical conclusion. There is also encouraging evidence of successful implementation of EMU and many of the departmental reviews of individual schools have been highly positive.

There have also been a number of smaller peace education ventures conducted by individual reconciliation groups or charitable foundations. The most ambitious has been the Quaker Peace Education Project (QPEP), which was based at Magee College, University of Ulster, between 1988 and 1995, and which specialized in prejudice-reduction work with schoolchildren. QPEP pioneered key support materials and teaching packages to help teachers implement EMU, and produced a number of teacher's manuals and reports (Tyrrell, 1991). In 1995 this programme metamorphosed into the EMU-promoting schools initiative, with funding from State and charitable sources, and a remit to provide curricular innovation and training opportunities for schools. In many ways the EMU-promoting schools initiative offers a potential window of opportunity for the dissemination of peace culture since its emphasis is on the creation of a network of skilled practitioners who will carry their training into dynamic innovation in school settings.

Several interesting examples of innovation have come from extra-mural and informal educational settings, such as with community groups. Notably, the Community Relations Council, the Forum for Community Work Education and the Workers Educational Association have given support for peace education courses which target adult audiences. These organizations have mounted an interesting range of courses for a wide body of professional groups and the general public. There have also been recent advances in the teaching of human rights education, reflecting (to some extent) continued dissatisfaction with the administration of justice in the province. In the realities of Northern Ireland this concern has traditionally been most manifest in the nationalist/Republican community and is expressed by information groups such as the Committee on the Administration of Justice, and local networks advocating community-based 'restorative justice'. The former has sought to provide an information and reporting service on all aspects of the administration of the justice and policing system in the province (Committee on the Administration of Justice, 1990). The latter are searching for local educational solutions to surmount the alienation felt by politically entrenched communities (in predominantly Republican areas) towards the United Kingdom State. Loyalist concern over policing and justice issues has also been growing, reflected in the campaign group Justice for All. The emergence of such organizations reflects grass-roots loyalist dissatisfaction with the status quo—a real chal-

lenge for any peace education curriculum. At every level of State provision, the pressures of responding to the impact of violence are apparent. One hopes that the creation of new government commissions in the fields of human rights, policing and other aspects of community life will contribute to a stronger civil society in Northern Ireland.

At the university level, the most obvious current example of peace education developments in Northern Ireland has been the University of Ulster's establishment of degree courses in peace and conflict studies at Magee College in the historic city of Londonderry/Derry. This city, divided geographically (with a mainly Protestant east bank and predominantly Catholic west), has experienced some of the worst violence of the Northern Ireland conflict. It has long been a government priority area for initiatives of peace and reconciliation. Encouragingly, in recent years, Derry has proven a perfect environment for peace education courses. The undergraduate degree there commenced in 1985 and a post-graduate diploma/masters came on stream in 1987. With considerable interest having been generated among serving teachers and educationalists, these programmes have now firmly established themselves in the education system in Northern Ireland. Like the University for Peace in Costa Rica, the university's peace studies courses have sought a firm grounding in the realities of the regional environment, while offering novel international perspectives and training. The work of academic programmes of this sort has done much to empower local people and equip them for many sectors of the employment market. They have also contributed to the goal of creating a peace culture that may prove sustainable in Northern Ireland.

There has been a solid interplay between local and international innovation in peace education. Indeed, peace education is probably one of the best examples of international education in the province. Curricular ventures such as Education for International Understanding, World Development Education, World Studies, Modern Studies and Creative Response to Conflict have all had an impact on the evolution of curriculum materials for peace education. There has also been an influence from related subjects and cross-curricular developments such as history and religious education. The result has been the evolution of innovative, dynamic curricular materials. Unfortunately, many of these efforts have lacked co-ordination and direction.

The notion of peace education in contemporary Northern Ireland is now quite well established in a number of educational sectors. However, the effectiveness of these strategies is greatly offset by diffidence about the direction of particular initiatives and by varying amounts of resistance. Therefore, while there are examples of undoubted success in the implementation of peace education, there are also considerable reservations about both content and strategy. While there is little question in such an ethnically divided society as to the propriety of education for peace, the implementation of curricular programmes with this thrust does not occur without question. There still exists a considerable body of resistance, some of it politically motivated and some reflecting a fundamental lack of understanding of the visionary goals of a peace education curriculum.

Against the tide: the school and political violence

Despite many years of curricular innovation in peace education, the schools system remains, for the most part, divided between controlled and maintained schools. Regrettably, this separation of Protestant and Catholic during the formative years of primary and secondary education constitutes an implicit obstacle to mutual understanding and tolerance. This is a highly sensitive issue, and remains an area where there has been little progress. Many of the influential power brokers representing both school sectors remain highly conservative. The vast majority of Northern Ireland schoolchildren continue to receive their elementary and secondary education at a school that is not mixed denominationally. Moreover, EMU and other more *ad hoc* peace education initiatives have never been able to achieve unequivocal support (Bullick, 1990). Equally significantly, peace education presents a challenge to communities that have 'fixed' views about the political milieu. Certainly Northern Ireland is a society where 'tolerance' might be interpreted by some as ignoring the atrocities of the 'other side'. Likewise, many Protestant politicians have been wary of discussions on 'justice' as they see this as a concept that has been hijacked by the nationalist community. Also, of course, Northern Ireland is a place where questions of equality cut across historically complex layers of prejudice and discrimination. All of these concerns are intensified when the political barometer rises after a particularly grisly bombing or sectarian killing. Recent political discussions have antagonized hard-line communities on both sides of the religious divide. Thus, even in the post-Agreement atmosphere, Northern Ireland's divided communities remain defensive.

Since the promulgation of paramilitary cease-fires and the cessation of large-scale political violence, one might imagine that Northern Ireland has become a more positive environment for peace education. In many respects, this is true. However, the challenge for peace education remains that of modelling its concepts against a superstructure that is at best uncommitted and at worst actively hostile. When one considers that peace educators do that against a background of a political and ethnic situation which is constantly shifting, it is clear that their task is difficult indeed. Moreover, we are only gradually coming to a realization that (aside from all the historical problems that have divided the communities in Northern Ireland) 'the troubles' have made their own impact. We must grapple also with the legacy of 'hate' that the experience of violence and sectarianism has produced. Brimful of historical prejudices between Protestant and Catholic, loyalist and nationalist—the Northern Ireland community has in recent years seen plenty further to hate in one another. Even during the relative peace of the late 1990s, peace education has (nevertheless) remained a challenge. Despite this, the efforts of those who have sought to innovate at the school and the community levels have shown the potential for creating a culture of peace that is sustainable and unique to Northern Ireland.

It is certainly true that the perceptions of young people in Northern Ireland have reflected the difficult and divided nature of their society. In a survey conduct-

ed in 1983 most young people thought it unlikely that Northern Ireland would be peaceful fifty years from that date (McWhirter, 1983). More positively, a more recent survey suggests that the majority of young people do feel that Northern Ireland can be 'peaceful in their lifetime' (Duffy, 1999). There is, however, a growing realization that it is insufficient merely to advocate peace. There is a necessity for positive peace-making initiatives. In that connection, a major reason for the strength of attention devoted to young people lies in their ready accessibility via the schools (McCartney, 1985). Moreover, there is some qualitative evidence which suggests that young people in Northern Ireland are essentially 'more tolerant' of 'the other community' than are their parents.

John Greer's 1982 study showed that of the 2,000 secondary school pupils surveyed, the vast majority were 'open rather than mistrustful towards the other side' (Greer et al., 1985). This surprising attitude of tolerance was also suggested by McKernan's 1980 study of pupil values, which revealed that most young people wanted 'a world at peace where they are free and happy'. McKernan felt that this demonstrated the idealism of youth, 'which should not be ignored by teachers, curriculum developers and all others with an educational responsibility' (McKernan, 1980). The author's 1999 survey suggested that people in their teenage years and those in their twenties were much more receptive to the ideals of cross-community contact and mutual understanding. The greatest degree of resistance to these ideals was among subjects in their forties and above (Duffy, 1999). It is clear that there exists a very large portion of the Northern Ireland population who are receptive to the ideals of creating a 'peace culture' of tolerance and non-violence. It is also encouraging that this sector of the community is likely to become more influential and to increase in number with the passage of time.

Progress in 'education for mutual understanding'

One manifestation of this support for (and success with) anti-sectarian work has been seen in the marked increase in inter-school activities. It is obvious that the notion of cross-community 'contact' has been integral to the vast majority of peace education initiatives in Northern Ireland. Not only have pupils been expected to learn about 'the other side', they have also been expected to have direct contact with them. This is certainly positive. In fact, most efforts to try to cultivate work in the field of tolerance and contact have been built on the notion of the 'contact hypothesis' (Cairns, 1987). The basic reasoning behind this much-employed concept is that by providing settings in which Protestant and Catholic children can meet, they can begin to acquire values of tolerance and self-recognition and to accept the integrity of cultural and political difference. As Amir puts it, the essence of the contact hypothesis is that:

contact between people—the mere fact of interacting—is likely to change their beliefs and feelings towards each other. [...] If only one had the opportunity to communicate with the others and to appreciate their way of life, understanding and consequently a reduction in prejudice would follow (Amir, 1969).

This is an appealing message, and one that underpins much of the recent innovation in peace education. Underlying integrated education and cross-community schemes in Northern Ireland is a belief that the earlier and more sustained the contact that occurs between Protestant and Catholic children, the more beneficial it will be in discouraging negative stereotypes. From this standpoint the integration of the separate school systems appears to be a sensible policy. Unfortunately, this movement accommodates only a small minority of the province's children (Cairns, Dunn & Giles, 1992). Recognizing that even the long-term integration of Northern Ireland schools is likely to be a pipe dream, many organizations have adopted an alternative strategy—intensive programmes of contact, most notably in the use of integrated holidays. This has often included trips to the 'neutral' ground of Europe, other parts of the United Kingdom or even the United States (McGinley, 1990).

Much of this work has been fruitful and has produced a reservoir of evidence that young people are seriously interested in being active 'promoters of peace'. Significantly, there have also been a number of criticisms of the whole rationale of the contact hypothesis (Brewer et al., 1984). A counter-argument to these schemes was that contact proved difficult or simply impossible to maintain once the holiday had ended. In the ethnically segregated neighbourhoods of cities like Belfast and Londonderry, upon their return the children simply reverted back to the sectarian norm. In reality, a careful programme structure was required in order to maintain the contact momentum. Responding to these criticisms, holiday organizers will now generally promote follow-up meetings after the holiday has ended. However, and no less seriously, there is also the inherent problem that in the current financial realities, such holiday schemes can only cater for a limited number of children. By implication, the impact of such 'contact-based' schemes is numerically limited, but that is not to underplay their value as part of a coherent strategy with individual groups of children.

The contact hypothesis has been evaluated at some length by social scientists in a number of countries. These evaluations tend to suggest that contact *per se* does not necessarily reduce inter-group prejudice (Trew, 1989). So with a growing realization that contact is not a 'cure all' for changing prejudices there has been an increasing emphasis on a search for ways in which the ostensibly more fruitful ground of inter-group contact may achieve this objective. An important qualification in this field is made by Brown and Turner in their distinction between interpersonal and inter-group contact (Brown & Turner, 1981). The conflict in Northern Ireland is basically an inter-group conflict that relates directly to the question of loyalty and identity. This suggests that if reconciliation is to be achieved, then contact should take place at an inter-group level and not just at an interpersonal level. Merely integrating schools or providing 'mixed' holidays is not necessarily to guarantee that inter-group contact will follow. Actually McWhirter and Trew's 1983 evaluation of holiday schemes suggests that the stress is on interpersonal contact (McWhirter & Trew, 1983). Sadly, there are relatively few projects that actually challenge the obstacle of the sectarian divide and of entrenched political beliefs. Thus inter-group projects where 'contact' alone is regarded as insufficient and the examination of

issues has priority are unfortunately rare. Moreover, as McCartney has shown, the bulk of the projects allow superficial contact only and do little to confront children with the realities of the conflict (McCartney, 1985). That is not to be overly negative in our criticisms of holiday scheme organizers, as in treading carefully on political questions they are simply conforming to a widespread norm in Northern Ireland that such issues are best avoided when dealing with 'mixed company'. However, to maximize their effectiveness, programmes aimed at promoting peace education should confront participants with the 'hard' issues that relate to a divided society.

There are a number of reasons why peace educators have largely failed in this critical task. A serious obstacle to peace education in Northern Ireland is the reality that both parents and teachers are resistant to discussion about political questions. This is often referred to as the 'denial syndrome' in which there is an effort to ignore the troubles by trying to preserve the schools as 'havens of peace' (Cairns, 1987). Indeed, for a considerable period both State and maintained schools presented themselves (perhaps rather naively) as offering an 'oasis' which protected pupils from the sectarian world outside. However, without a more open discussion about the conflict there seems to be little chance that genuine inter-group contact will ever be possible. That is not to overlook the extent to which topics relevant to political violence and political divisions already feature in the curriculum (especially in school history lessons). This topic was analysed by Darby in the mid-1970s, and still remains a concern for educationalists today (Darby, 1983). It is clearly difficult to make real progress in bringing Catholic and Protestant children together on a day-to-day basis, but one should not rule out contact *per se*. A strong possibility would be one in which individual schools discussed such sensitive issues separately and then collaborated in structured meetings to further develop group work in this field. Thus any contact which occurred would take place on an inter-group level, not merely an interpersonal level. Even so, it is erroneous to exaggerate the extent of contact and co-operation across the sectarian divide. The balance sheet is not impressive. It still remains to be seen how far government support for the promotion of reconciliation in Northern Ireland will break down the barriers to inter-group contact. Now there is undoubtedly a government resolve to promote improvements in this matter. As early as 1982, the Department of Education for Northern Ireland issued a ground-breaking circular to schools which stressed their obligation to formulate and 'sponsor policies for the improvement of community relations [so that] children do not grow up in ignorance, fear or even hatred of those from whom they are educationally segregated' (Northern Ireland, 1982). To date, there have been plenty of new projects, but depressingly little in the way of effective innovation. In short, there exists a potential 'blueprint' by which to forge a culture of peace for the future of Northern Ireland, but implementation has been slow.

The role of the State has been paramount in the limited progress made thus far. The practical support for these laudable objectives has come primarily from the EMU initiative, which has been one of the most substantially funded educational ventures in many years. On the negative side, these developments have occurred at a time when schools are under enormous administrative and financial pressures fol-

lowing a range of government changes. These have required increased administrative responsibilities at every level in the schools as well as the obligations inherent in local budgetary management. With schools so intensely preoccupied with the vagaries of their own increasingly limited budgets, educational innovation of any kind has (regrettably) taken something of a back seat.

There have been several valuable surveys of the problems and impact of EMU at the regional level (Bullick, 1990). Rarely in recent years have teachers and principals faced such a variety of new duties. The additional onus to make realistic headway with EMU has been seen by many as the proverbial 'last straw'. An interesting review of the early years of EMU is offered by Smith and Robinson (1992). In that context EMU is an interesting innovation, but unfortunately it may yet turn out to be a lost hope. There was an encouraging 'window of opportunity' during the early 1990s when generous opportunities for 'in-service training' and secondment encouraged many teachers to take courses that would assist them with preparations for EMU. Alas, these opportunities have since dried up, and the government (until recently) has shown little evidence of providing further support of this kind. Given the Labour Government's current priority of staff training, these programmes may be re-initiated and this would surely contribute to a much more positive spirit of curricular innovation.

Conclusion—problems and possibilities

It is quite clear that there are both problems and possibilities that colour the implementation of peace education initiatives in Northern Ireland. This paper has explored the specific initiatives of peace education and located them in the context of a segregated society and school system. In that environment there have been a variety of anti-sectarian efforts in recent years which suggest the possibility of improvement. One of the more hopeful signs is the rise of the integrated schools movement that may yet develop to find a broader social class base than it currently has. However, whatever the value and the merits of individual initiatives in peace education, it is difficult to be optimistic about the long-term possibilities of promoting change in this way. If the present generation of young people are to be representative of the future, it is unlikely that much will change.

Since so much of the process of political socialization (in Northern Ireland as elsewhere) occurs not in the schools but in the home, young people acquire the politically entrenched opinions of their parents. However, there is little hope of change at all unless there exists the necessary political and educational climate. Therefore (and with great sensitivity and care) there is a need for a dynamic model of education which will encourage young people in Northern Ireland to question the traditional sectarian values of their homes. Naturally this constitutes a problematical role for the schools and is likely to be a long, slow process. However, despite these limitations, the schools could well prove to be the only long-term way of promoting change in a highly sectarian society. They may yet be the crucial link in the creation of a culture of peace for Northern Ireland.

It is apparent that there have been important developments in the political situation in Northern Ireland that may impact on the feasibility of innovation in peace education. In the euphoria of the May 1998 referendum result—widely interpreted as a ‘vote for peace’—one saw a clear will for peaceful politics in Northern Ireland. However, Protestants and Catholics still have to confront the thorny reality of their co-existence (especially) in the ethnically most divided parts of Northern Ireland. There remain major social, cultural and economic differences dividing the population that may be beyond constitutional resolution.

Progress for both sides is largely defined in the religious and national imperative of their own side, and to the detriment of the other. Yet now they are both supposed to share a common vision of government and ‘State destiny’. In both Republican and Loyalist areas of Northern Ireland many aspects of the conflict remain real and potentially volatile. The ‘talks process’ has proven surprisingly impervious to the continued paramilitary activities that prevail in these areas. Community divisions remain deeply entrenched. In such neighbourhoods, genuine cross-community links are nowhere to be found. Indeed, it seems too short a space of time for such a metamorphosis to have occurred. Then there are the continuing risks of a fresh eruption of terrorist violence. The possibility of future armed activities by the splinter groups of the Provisional IRA (the Real and Continuity IRA) or by Loyalist paramilitaries cannot be dismissed. Nevertheless, the situation is markedly more positive if the spirit that led to the ‘Belfast Agreement’ and its new Assembly can be sustained. One certainly hopes that it may be possible to persuade the parties that continued negotiation is purposeful and potentially constructive.

Federico Mayor, former Director-General of UNESCO, writes of the importance of turning a ‘new page’ in our civil society—towards a culture of peace based on a culture of democracy (Mayor, 1995). It is clear, as Mr Mayor has indicated, that the beginning of this new page can be written by all of us, as individuals create and invent the texture of their lives in their local communities, freed from the fears of the ‘war culture’. UNESCO’s new Director-General, Mr Koïchiro Matsuura, has written that his wartime childhood inspired his commitment to peace (Matsuura, 1999). This is precisely the ethos of personal commitment that should be cultivated by schools in divided societies such as Northern Ireland.

It would be too optimistic to conclude that Northern Ireland is well on the road towards achieving a new civil society based on cross-community contact and mutual respect. Nevertheless, teachers and peace educationalists have a potentially critical responsibility in contributing to peaceful change. In such a process, the role of the schools is undoubtedly vital. The challenge of peace education is to persuade participants as to the alternatives to their prejudices. Sadly, this task remains as compelling today in Northern Ireland as it was at the outbreak of the conflict during the late 1960s. Yet there prevails a spirit of peace, and of innovation for peace education in schools, which may ultimately create the genuine culture of peace that would transform the entire context of life in Northern Ireland. There is ample evidence that there are both experienced teaching practitioners and community activists whose work for peace education at every level of Northern Ireland society has done

much to contribute to that culture. It is work of this kind that may yet consolidate the atmosphere of renewed political compromise that has been forged during the rough and tumble of the 'talks process' in recent years.

References

- Akenson, D.H. 1973. *Education and enmity: the control of schooling in Northern Ireland 1920–50*. London, David and Charles.
- Amir, Y. 1969. Contact hypothesis. *Psychological bulletin* (Washington, DC), vol. 71, p. 319–42.
- Brewer, M.B., et al. 1984. Beyond the contact hypothesis: theoretical perspectives on desegregation. In: Miller, N., et al. *Groups in contact*. Orlando, FL, Academic Press.
- Brown, R.J.; Turner, J.C. 1981. Interpersonal and intergroup behaviour. In: Turner, J.C.; Giles, H., eds. *Intergroup behaviour*. Oxford, Blackwell.
- Bullick, E. 1990. *Education beyond enmity: an evaluation of the Education for Mutual Understanding Initiative*. Londonderry, University of Ulster. (Master of Arts in peace studies.)
- Cairns, E. 1987. *Caught in crossfire: children and the Northern Ireland conflict*. Belfast, Appletree Press.
- Cairns, E.; Dunn, S.; Giles, M. 1992. *Surveys of integrated education in Northern Ireland*. Coleraine, UK, Centre for the Study of Conflict.
- Committee on the Administration of Justice. 1990. *Cause for complaint: the system of dealing with complaints against the police in Northern Ireland*. Belfast, Committee on the Administration of Justice. (Pamphlet no. 16.)
- Crick, B., ed. 1998. *Education for citizenship*. London. (Official Report of the Advisory Group on Citizenship.)
- Donnelly, F.M. 1998. *Transforming integrated education: an historical and contemporary analysis of developments in integrated education*. Londonderry, University of Ulster. (Master of Education thesis.)
- Duffy, T.M. 1993. Peace education in conflict: the school and society in Northern Ireland. In: Bjerstedt, A., ed. *Peace education: global perspectives*, p. 19–33. Stockholm, Almqvist and Wiksell.
- . 1999. *The Northern Ireland community and attitudes to peace*. Londonderry, University of Ulster, Magee College. (Draft research report.)
- Dunn, S. 1986. The role of education in the Northern Ireland conflict. *Oxford review of education* (Oxford, UK), vol. 12, no. 1.
- . 1989. Integrated schools in Northern Ireland. *Oxford review of education* (Oxford, UK), vol. 15, no. 2.
- Dunn, S., et al. 1984. *Schools together?* Coleraine, UK, Centre for the Study of Conflict.
- Fahey, J.J. 1978. Peace education: its relevance to Northern Ireland. *The northern teacher* (Belfast), vol. 12, no. 5.
- Greer, J., et al. 1985. *Teaching religion in Northern Ireland: a guide to the use of discussion*. Coleraine, UK, University of Ulster.
- Matsuura, K. 1999. *The Times higher education supplement* (London), 29 October.
- Mayor, F. 1995. *The new page*. Aldershot, UK, UNESCO/Dartmouth Publishing.
- McCartney, C. 1985. *An overview of reconciliation projects*. (Paper presented to Contact and Reconciliation of Conflict, Belfast.)

- McGinley, E. 1990. *The Ulster Project: a study in its operation with reference to third party consultation, 1985–1989*. Londonderry, University of Ulster. (Master of Arts in peace studies.)
- McKernan, J. 1980. Pupil values as social indicators of intergroup differences in Northern Ireland. In: Harbison, J., et al., eds. *A society under stress*. Somerset, Open Books.
- McWhirter, L. 1983. Looking back and looking forward: an inside perspective. In: Harbison, J. *Children of the troubles*. Belfast, Strandmillis College Learning Resources Unit.
- McWhirter, L.; Trew, K., eds. 1983. *The Northern Ireland conflict: myth and reality*. Belfast, Strandmillis College.
- Morrow, D., et al. 1991. *The Churches and inter-community relationships*. Coleraine, UK, Centre for the Study of Conflict.
- Murray, D. 1983. Schools and conflict. In: Darby, J., ed. *Northern Ireland: the background to the conflict*, p. 136–50. Belfast, Appletree.
- . 1985. *Worlds apart. Segregated schools in Northern Ireland*. Belfast, Appletree.
- Northern Ireland. Department of Education. 1982. *The improvement of community relations: the contribution of schools*. Bangor, UK. (Circular no. 1982/21.)
- Robinson, A. 1987. *Education for mutual understanding—roles and responsibilities*. Conference report, 30 April–2 May, Coleraine, UK, University of Ulster.
- Rogers, P. 1991. Education for peace in the classroom—curriculum development strategies and materials: a case study of Ireland. *Peace, environment and education* (Malmö, Sweden), no. 24, p. 1–17.
- Smith, A.; Robinson, A. 1992. *Education for mutual understanding: perceptions and policy*. Coleraine, UK, Centre for the Study of Conflict, University of Ulster.
- Stradling, R., et al. 1984. *Teaching controversial issues*. London, Routledge.
- Trew, K. 1989. Evaluating the impact of contact schemes for Catholic and Protestant children from Northern Ireland. In: Harbison, J., ed. *Growing up in Northern Ireland*. Belfast, Strandmillis College.
- Tyrrell, J. 1991. *Strategies for overcoming resistance from teachers in the NCBI prejudice reduction model in the context of experiential EMU programmes*. Londonderry, University of Ulster. (Master of Arts in peace studies.)

EDUCATION FOR SUSTAINABLE DEVELOPMENT

EDUCATION FOR

SUSTAINABLE DEVELOPMENT:

A LOCAL AND

INTERNATIONAL CHALLENGE

Gustavo López Ospina

The pressing issues

At the beginning of the twenty-first century, our societies and institutions are faced with more and more complex problems related to globalization, technological progress and rapid, often unpredictable, changes in almost all areas of life. We have finally understood that the Earth is an integrated system. Human beings are increasingly becoming interdependent on a global scale. At the level of human activities, growing interdependence is already a reality. Population growth, the degradation of the environment and patterns of consumption and production are all key ele-

Original language: French

Gustavo López Ospina (Colombia)

Director of UNESCO's interdisciplinary project 'Education for sustainable development'. A graduate of Antioquia University in Medellín, Colombia, he holds a master's degree from the University of the Andes in Bogotá. He has served as Colombia's vice-minister of education, as adviser to the Colombian Government and—in his capacity as UNESCO's representative to Brazil—adviser for social and economic planning to the Brazilian president. From 1982 to 1992 he was the director of the UNESCO department responsible for Latin America and the Caribbean. More recently, he has worked as director of UNESCO's New York Office and as director of the UNESCO Regional Centre for Higher Education in Latin America and the Caribbean.

ments of the global picture, ones we must take into consideration as we evolve towards sustainable development. At the end of 1999, we celebrated the global population reaching 6 billion. Given the prediction that it will surpass 9 billion by 2050, how can we conceive of a system in which human beings are truly nature's allies? Already 20% of the world's population consumes 86% of its total resources, while the poorest 20% of the population consumes only 1.3% of these same resources. Another striking fact is that a child born in an industrialized country will consume thirty to fifty times more resources than a child born in a developing country. These realities, linked with complex political, economic and military considerations, exert a sharp and powerful impact on the environment and correspond to a new, radically different world. Whether this new world is viable depends on the involvement of all concerned: governments, the private sector, communities, universities and, in particular, those working in the education sector.

At the dawn of a new century, the Earth's people recognize the urgent necessity of working towards a viable future, and of taking active control over their future and that of their community. People may not be able to define 'sustainable development' or 'viability' with precision—after all, the experts have not reached a consensus either—but they are distinctly aware of the dangers they face and the need for organized action. They realize that each year between 5 and 7 million hectares of agricultural land are lost as a result of soil degradation or urbanization. Another 16 to 20 million hectares of tropical forests are sacrificed as a result of inadmissible practices. More than 1 billion people have no access to clean drinking water. About 2.8 billion people have no access to sanitary facilities. Tangible evidence of these problems includes the quality of our air, the taste of our water, and the vast expansion of congested living areas and despoiled countryside. They are brought unavoidably to our attention through newspapers and radio and television programmes. The list of related topics about which we are all well informed is long: the pollution alerts and the bans on driving or the beach closures; hunger and famines; the spread of ailments such as asthma and allergies; the contamination of drinking water; 'the greenhouse effect' with the attendant risks of global warming and a marked rise in the level of the ocean's surface; the destruction of forests the world over; the spread of deserts; the extinction of living species; the destruction of fish and birds caused by oil spills and pollution; as well as forest fires, floods, wind storms, droughts and other 'natural' disasters.

Towards a deeper reflection on sustainable development

In the light of the vast array of definitions and descriptions of sustainable development, the best way to understand it is as an evocative vision rather than as a neatly defined concept. We can hence delimit the notion of sustainable development as follows:

- Sustainable development is perhaps more a *moral precept* than a *scientific concept*, linked as much with notions of fairness as with theories of global warming.

- Sustainable development involves the natural sciences and economics, but it is primarily a matter of culture. It is connected with *values* people cherish and with the ways in which they perceive their relationships with others.
- Sustainable development is a response to the unavoidable need to develop a new approach to relations between peoples and a new understanding of habitat—the foundation and nourishing source of human existence.
- Sustainable development occurs when we acknowledge the relationship between human needs and the natural environment. The interdependence of humans and the environment necessitates a refusal of the obsessive pursuit of any single development or environmental objective to the detriment of others. The environment cannot be protected in a way that leaves half of humanity in poverty.
- Linking social, economic and environmental concerns is a crucial aspect of sustainable development. Creating such links demands a deeper, more ambitious way of thinking about education, one that retains a commitment to critical analysis while fostering creativity and innovation. In short, it demands an ethic and value system sensitive to the value of cultural identity and multicultural dialogue.
- To avoid false dilemmas, we must understand sustainable development as a new and viable long-term relationship between human beings and their habitat, one that places humanity in the forefront.

But from the methodological point of view, we can also affirm what sustainable development *should be* by formulating its opposite:

- Sustainable development does not embody a new, fully formed theory of human existence. Rather, it incarnates a plea for integral thinking—thinking responsive to the complexity of the real systems of everyday life.
- Sustainable development is not a magic answer; it is a new vision of the future. It requires, on the one hand, that the countries of the North take radical steps to address problems related to consumption, production and their impact. On the other hand, developing countries must promote fairness, alleviate poverty, reinforce justice and democracy, adopt development strategies that benefit all strata of society, and address today's serious environmental problems.
- Sustainable development is not a new method of analysis. It is a new way of looking at reality. It requires that we reject four intolerable and commonplace features of contemporary life that put the future of the world in jeopardy: (a) inequality, caused by excessive confidence in the distribution of savings revenue in times of crisis; (a) instability, brought about by an excess of State intervention, lax monetary policies and inflationary processes; (c) inefficiency, caused by countries turning in on themselves (Latin America is a good example), accompanied by market shifts that seriously affect the rural areas; and finally, (d) exclusion and inequality which are still very much in evidence and are wrongly accepted as inevitable.
- Sustainable development is not an end in itself but a way of managing possible feasible scenarios for the future and fostering new approaches to social dialogue. It is about searching for ways of promoting new equilibria, new priorities and new options and possibilities, while maintaining harmony in all things.

- The idea of sustainable development brings nothing new. It is an invitation to goodwill in fostering prevention, risk control and harmony. It contributes to the creation of new synergy among social actors and of strategies that promote more efficient and transparent governance.
- Sustainable development is not a new way of dividing society into sectors. It reflects and promotes a quest for unity, a respect for multiculturalism, acceptance of diversity and integrative responses to the complex problems we are obliged to face.
- Sustainable development does not imply the affirmation of a neo-liberal economic model; rather, it proposes (a) a world of solidarity that would accompany profound changes in existing economic arrangements; and (b) a reassurance of democratic procedures.
- Sustainable development is not a new utopian vision. Rather, the call for sustainable development is an alarm bell set off by the lack of respect for humane values in everyday life.
- Sustainable development is not an abstraction. Rather, it is rooted in common sense and gives value to what is essential, thus placing it at the service of new ways of living.
- A commitment to sustainable development is in no way a search for new forms of government that ensure the continued exercise of power by minorities in ways that reflect a disregard for human security, freedom and autonomy.

In the context of education, to work towards sustainable development means:

- To place a system of values and ethics at the centre of society's concerns.
- To encourage a meeting of disciplines, a linking of knowledge and of expertise, and to render our understanding more integrated and contextualized and so, in turn, to open up new horizons for justice and equality (equity).
- To encourage lifelong learning, starting at the beginning of life and grounded in life—one based on a passion for a radical transformation of society and a change in the moral character of society.
- To advance new conceptions rooted both in traditional scientific rationality and in popular beliefs and consciousness, drawing on these as a source of humane understanding and a pointer to collective wisdom.
- To encourage the refinement of locally based processes of change and of integral community advancement, one not marked by a passive receptivity to or a mindless repetition of homogeneous development models.
- To give priority to fundamental critical questions, to the method as a means of approaching tangible realities, by promoting dialogue among the sectors of society and a real interdisciplinary approach.
- To elevate once again the importance of social subjectivity and of the qualitative dimension of social life.
- To encourage new alliances between the State and civil society in promoting citizens' emancipation mediated by the practice of democratic principles while fully acknowledging the complexities inherent to every human reality.

- To promote a culture of citizenship and give value to social actors (such as, non-governmental organizations and other sub-groups).
- To mobilize society in a concerted effort so as to eliminate poverty and all forms of violence and injustice that each day work to jeopardize the future and the maintenance of a good quality of life.
- To valorize aesthetics, the creative use of the imagination, an openness to risk and flexibility, and a willingness to explore new options.
- To assert the importance of local communities and their ties with the entire Earth and, indeed, with the universal.
- To identify and pursue new human projects in the context of a planetary consciousness and a personal and communal awareness of global responsibility.
- To engender new hopes and ways of channelling the valuable energies and resources of entire nations.
- To seek understanding, to anticipate, to imagine and to contextualize.
- To reach a stage in which the possibility of change and the real desire for change are accompanied by a concerted, active participation in change, at the appropriate time, in favour of a sustainable future for all.
- To instil in the minds of all people a conviction of the values for peace in such a way as to promote the creation of new lifestyles and living patterns.
- To develop to the maximum the potential of all human beings throughout their lives so that they can achieve self-fulfilment and full self-expression with the collective achievement of a viable future.

Education—key to a viable future

To address education for sustainable development, we must first refer to the challenge it represents for everyone.

Lifelong learning is another fundamental challenge; it is the *sine qua non* of educational progress. The concept of education throughout the full span of life is the most important innovation to appear in recent educational theory. The opportunity for education can no longer be considered as something limited to a particular moment in a person's growth. It is best seen, at all levels, as a continual process in which instruction is offered formally and informally by different systems to people at every stage of life. It is only by taking this route that we will successfully reach those who otherwise could not be reached—to include the excluded—and take up the challenges of our times, of which sustainable development is definitely one of the more important.

Education in all its forms is essential to sustainable development. In many respects primary education makes a positive contribution to combating the problems of poverty, the degradation of the environment and the improvement of nutrition. Improved access to primary education for girls and women yields tangible benefits, including reductions in birth rates and improvements in health. Education is also an important factor in fostering social cohesion and democratic government. Scientific education has a unique part to play in facilitating sustainable development:

it can widen our capacities, especially in areas such as eco-technology and the development of renewable energy sources, and it can ensure the widespread availability of scientific information—which in turn is increasingly necessary for informed ethical decision-making.

But traditional education on its own will not enable us to promote and bring up to date a commitment to sustainable development. New educational approaches are needed to encourage necessary lifestyle changes, to help us successfully prevail over wastefulness, to mobilize support for needed public and private initiatives, to develop a new ecological vision and to nurture a sense of global solidarity. This challenge, articulated in Chapter 36 of Agenda 21,¹ represents nothing less than an educational reorientation designed ‘to promote enlarged public understanding of, critical analysis of and support for sustainable development’.

Education for sustainable development must explore the economic and social implications of sustainability by encouraging those who are learning to reflect critically on their own areas of the world, to identify non-viable elements in their own lives and to explore the tensions among conflicting aims. It will also be crucial to identify development strategies suited to the particular circumstances of various cultures in the pursuit of shared development goals. Educational approaches must take into account the experiences of indigenous cultures and minorities and both acknowledge and facilitate their original and important contributions to the process of sustainable development.

We are convinced that movement towards sustainable development depends more on the enlargement of our moral sensitivities than on the growth of our scientific understanding—important as that is. Education for sustainable development cannot be concerned only with disciplines that improve our understanding of nature, despite their undoubted value. Success in the struggle for sustainable development requires an approach to education that strengthens our engagement in support of other values—especially justice and fairness—and the awareness that we share a common destiny with others.

Some countries have already begun to model such a conception of education, and their experience provides useful insights for other countries. Articles in this journal have documented the ways in which some European, Asian, African and Latin American countries have already launched constructive educational initiatives in this domain. Especially worth acknowledging are those initiatives that have focused on the interdisciplinary and cross-disciplinary dimensions of education and which have consequently functioned in recent years as catalysts for innovation. UNESCO has actively supported this effort and has decided to strengthen its supportive ties with those engaged in this enterprise. We welcome the opportunity to assist innovative efforts that focus on vital needs at all levels—regional, sub-regional and national. Here, it is important to stress the contribution of civil society and non-governmental organizations.

Nonetheless, much remains to be done at the political and structural levels before the commitments outlined in Agenda 21 are realized.

It may provide some useful information to focus on the efforts of the United Nations Intergovernmental Commission for Sustainable Development (CSD) towards the implementation of Agenda 21, as well as on the relevant actions taken by UNESCO.

In 1996, the Intergovernmental Commission for Sustainable Development, the principal mechanism through which governments can monitor the implementation of Agenda 21, decided to launch a special work programme based on Chapter 36 of the Agenda ('Education, public awareness and training'). In 1998, it approved an expanded version consisting of seven sub-programmes and twenty-three tasks.

As was shown in the 1997 special session of the United Nations General Assembly (Rio +5), it is imperative that the commitments accepted by governments in the Agenda 21 programme, as well as within the context of the CSD, are implemented. This matter of utmost importance for education was reiterated by the CSD at its seventh session held in April/May 1999, at which time governments voted for accelerated implementation of the work programme by all concerned actors.

As the organization responsible for this CSD work programme, UNESCO has an internal and an external role to play. The organization as a whole has been mobilized to address issues related to education from the perspective of sustainability. With the approval of the UNESCO General Conference, it has aligned its agenda with the priorities specified in the CSD work programme. UNESCO has established lines of communication with its UN partners, non-governmental organizations, the industrial world and other sectors of society to create new synergy for innovation. The organization is responsible not only for its own programmes, but, on behalf of the United Nations as a whole, also for energizing other relevant actors identified by the CSD to assist with the implementation of the work programme and for reporting to the Commission on progress.

In August 1999, governments turned their attention to the opportunity provided by the new framework for international action. Action at the national level being crucial, the CSD work-programme assigned primary responsibility to governments for its execution. These tasks should include: (a) reassessing national policies from the perspective of sustainable development; (b) reorienting existing systems of formal education; (c) integrating education into national sustainable development strategies; and (d) raising public awareness.

As we all understand, sustainable development is a difficult and complex task, requiring new partnerships between public and private actors. Within governments, education for sustainability is of direct concern not only to ministries of education, but also to ministries of environment, planning, agriculture, health and commerce, among others. Understood, as it now is, as a lifelong process and as a privileged tool in the quest for a sustainable future, education demands the involvement of actors different from those who have traditionally been responsible. A similar cross-sector dynamic is also being created within the United Nations as a whole.

At the heart of this new international consensus is a new vision of education, public awareness and training as essential foundations for sustainable development and as indispensable for advances in other spheres, such as science, technology, legislation and production. Within the plans of action, education is no longer seen as an end in itself, but as a means:

- To effect the changes in value systems, behavioural patterns and lifestyles necessary to achieve sustainable development, and ultimately democracy, security and peace;
- To disseminate the knowledge and skills necessary to foster sustainable production and consumption patterns and to improve the management of natural resources, agriculture, energy and industrial production;
- To ensure an informed populace, prepared to support changes in other sectors conducive to sustainability.

More and more integrated follow-up to these plans of action is being emphasized. Chapter 36 of Agenda 21 provides a reference framework for integrated approaches to education, public awareness and training. Integration is the responsibility not only of international institutions, such as those under the umbrella of the United Nations, but also and most importantly of national and local entities. In addition to governments and non-governmental organizations at all levels, a range of key groups, including women, youth, farmers, members of parliament, scientists, business people and industrial circles, are called upon to participate.

Programmes at the national level

The March 1998 report of the United Nations Secretary-General to the Intergovernmental Commission for Sustainable Development largely underscored the important and key role of national governments in refining and promoting global strategies for sustainable development. It also emphasized the need to integrate education into these strategies in a creative and effective manner. This means involving national governments—that need to play leading roles—along with major non-governmental organizations and associations, citizen groups, and especially enterprises, educational establishments and other specialized institutions. Institutions and organizations of the United Nations System must also be involved. These institutions and organizations are committed to working closely with national authorities to implement the recommendations of the various international conferences in favour of sustainable development. The media, from the most modern to the most traditional, should also be engaged in explaining the purposes and goals of the programmes and in making the public aware of government plans and actions.

Governments are primarily responsible for helping the public internalize a vision of sustainable development and for clarifying its benefits. They need to make use of all available means, both public and private. The national school curricula at all levels must incorporate the theme of sustainable development, which should also, therefore, receive appropriate emphasis in pre-service and in-service teacher-training programmes. Specialized institutions of all sorts should be actively involved; health-care professionals and institutions, for instance, should help the public understand the relationship between the environmental factors and problems of health and hygiene.

National leaders must demonstrate the political will to make sustainable development a high priority and to make education, training and other means of raising public awareness essential methods of achieving national objectives. They must trans-

late the concept of sustainable development into clearly definable steps and goals for every sector. They should, for instance, adopt clear timetables for reorienting education systems—and budgets that provide the resources necessary for doing so. In many countries, national strategies or plans for sustainable development are equal to the task of mobilizing and focusing efforts in support of national priorities. Similar plans exist at the regional and sub-regional levels.

Civil society at all levels, especially the national, should express its support for vigorous action aimed at moving towards sustainable development. Organizations with specialized interests and competencies should not only support government actions, but also monitor and assess governmental strategies within their areas of competence and keep the public informed of advances and problems. Teachers' associations, for instance, should carefully assess the progress of efforts to reorient education systems towards promoting sustainability and should keep both their members and the public informed.

At the local level, efforts should be made to ensure that everyone is aware of the meaning and scope of the idea of sustainable development. Discussions and debates must be organized to promote understanding and win community support. These discussions should take place in all community settings and institutions, including schools.

People need to understand the need for sustainable development at the local level. People and communities should identify practices that are not sustainable and explore ways of improving them. It is critical that everyone, especially women, be involved in this discussion. Particularly in rural communities, women play key roles in economic as well as social and cultural aspects of life. The local community and the household are important entry points for messages regarding sustainable development, especially those targeted at adults and out-of-school children. Schools, too, at all levels, should be actively involved in discussions regarding sustainable development and in actions designed to foster it, and should keep their members and the public informed.

Conclusion

New partnerships among governments, the private sector, academic and scientific communities, teachers, non-governmental organizations, local communities and the media must be a priority, as they are essential to the birth of a culture of viability.

I would like to conclude by suggesting some elements of a strategic vision of education for sustainable development. It will entail:

- Encouraging respect for ethics and values—the principal vector for promoting a viable future, as well as for fair and just societies;
- Promoting a true 'international democracy of knowledge' that will at the same time strengthen the richness and diversity of existing cultures;
- Fostering research, experimentation and innovation in ways that will fully contribute to the quest for a viable future;

- Reorienting the education system so that it takes account of today's complex realities—including globalization, interdisciplinary synergy and the possibilities created by new technologies;
- And, of course, strengthening regional co-operation efforts.

The articles in this issue testify to the progress towards creating systems of education for sustainable development that people in the four above-mentioned regions have already made. At the international level, however, we need a more holistic, cross-sector and interdisciplinary approach. The point is not only to introduce limited programmes or to disseminate material to formal education at various levels. It is also, and primarily, to foster a new, integrated vision of education as the driving force of the future and thus to bring about a global change to all levels of society. This cannot be the sole responsibility of educational authorities as such. It demands the involvement of all social actors, beginning with the leaders of each State or society. There is already an awareness at the international level of the magnitude of the necessary efforts and the direction that they must take. That such awareness exists is inspiring; it should spur us on in our quest for a truly radical transformation of the current situation. In this quest, civil society is destined to play the most important role. That is why activities designed to mobilize civil society to support sustainable development are especially important.

Note

1. Agenda 21 is the programme adopted by participating governments as a result of the United Nations Conference on Environment and Development (UNCED) held in Rio de Janeiro, Brazil, in 1992. It calls primarily for the adoption of strategies, policies and plans at the national level—plans that are to be supported by international, regional, sub-regional and non-governmental organizations. It also encourages mobilization of the public.

EDUCATION FOR SUSTAINABLE DEVELOPMENT

TOWARDS EDUCATION FOR

A SUSTAINABLE FUTURE

IN ASIA AND THE PACIFIC

John Fien, Osamu Abe and Bishnu Bhandari

Introduction

This paper outlines trends towards education for a sustainable future in the Asia-Pacific region. This region covers about 23% of the world's total land and extends from Mongolia in the north to Tonga in the south, Japan in the east to Pakistan in the west.

Original language: English

John Fien (Australia)

Director of the Centre for Innovation and Research in Environmental Education, Griffith University. Teaching and research interests focus on the reorientation of education towards sustainability in the formal school sector, teacher education and community education. He is the author of *Environmental education: a pathway to sustainability and education for the environment* and *Critical curriculum theorising and environmental education*. Editor of several UNESCO project publications, including *Teaching for a sustainable world* (1995), *Learning for a sustainable environment* (1997) and *Teaching and learning for a sustainable future* (2000). E-mail: J.Fien@mailbox.gu.edu.au

Osamu Abe (Japan)

Professor in Education at Saitama University in Japan and the Project Leader of the Environmental Education Project of the Institute for Global Environmental Strategies. A leading authority on conservation education and a well-known figure in both the environmental NGO and environmental education movements in Japan. E-mail: o-abe@iges.or.jp

Bishnu Bhandari (Nepal)

Senior Research Fellow in the Environmental Education Project of the Institute for Global Environmental Strategies in Japan. Former Director of the International Union for the Conservation of Nature's conservation programme in Nepal. With Osamu Abe, he has convened a series of international conferences on environmental education in the Asia-Pacific region. They have published *An overview of environmental education in the Asia and Pacific region* (1999) and *A regional strategy on environmental education in Asia-Pacific* (1999). E-mail: bhandari@iges.or.jp

It contains nearly forty countries, of which seven are in South Asia, ten in South-East Asia, five in North-East Asia and fifteen in the Pacific and Oceania region. The region is home to 58% of the world's population, but over 40% of the region's population is concentrated in five countries: China, India, Indonesia, Pakistan and Bangladesh. The economy and the livelihoods of most people in the region are predominantly rural, but urbanization has been so rapid in recent years that the region also contains fifteen of the twenty-five cities in the world with over 10 million people—and thirteen of the fifteen most polluted cities in the world (Asian Development Bank, 1997).

Asia and the Pacific is a region of great cultural, economic and environmental diversity. This is reflected in its description in UNESCO's 50th anniversary commemorative publication on the region, which described it in the following way:

From the world's highest city, Lhasa [...] to the world deepest lake, Lake Baikal [...]; from the highest mountain to the deepest seas; from the driest deserts to the dampest forests; the Asia-Pacific region covers an outstanding array of geography and culture.

The region is one of sharp contrasts. It has two of the world's most populous countries, China and India, and some of the world's smallest countries, Nauru in the Pacific and the Maldives in the Indian Ocean. It has one of the world's richest countries, Japan, and the world's poorest, Cambodia and Bangladesh.

With over 700 languages in Papua New Guinea alone, the region's ethnic and linguistic diversity is greater than anywhere else in the world. Great cultures have left legacies such as the Great Wall of China—2,350 kilometres long— [...] and the legendary temples of Borobodor in Indonesia. A wealth of religions criss-cross the region, ranging from Buddhism, Hinduism, Christianity, Islam and Sikhism, to other faiths such as Confucianism, Jainism and Taoism (UNESCO-PROAP, 1996).

This diversity means that it is difficult to be anything but general in an account of the region's development of education for a sustainable future. This paper begins with an overview of the present state of the natural and social environment in the Asia-Pacific region. This is followed by an account and examples of educational responses to the challenges of sustainable development. The main theme developed here is that countries and organizations in the region responded well to the first phase of challenges to sustainable development posed by Chapter 36 (on Education Information and Training) in Agenda 21, the action programme adopted at the 1992 United Nations Conference on Environment and Development. A wide range of innovative examples of ways in which this has been done is provided as an illustration. However, the analysis of these trends, which is presented in the following section of the paper, indicates that these innovations may represent a case of 'innovation without change' as there is little evidence in the region of the broad reorientation of education practices, systems and structures that is necessary for education to support the processes of sustainable development at the national or regional level. In this paper the wider reorientation of education is called the second phase of education for a sustainable future. The paper concludes with a brief case study of one project in the region that is using teacher education as a starting point to provide the necessary capacity development to support this second phase of educational reform.

The state of the region

Despite the formulation of many international and national policies for sustainable development in recent years, the global picture is not encouraging. The state of the planet and the lives of the people who call it home have been exhaustively documented by such bodies as the United Nations Development Programme (1998), the United Nations Environment Programme (1997), the World Bank (1998), the World Resources Institute (1998), the World Watch Institute (1998) and the World Wide Fund for Nature (1999).

Data on conditions in Asia and the Pacific are also becoming increasingly well documented, as seen in reports of the World Bank (1993) and the Asian Development Bank (1997). These publications paint a generally bleak picture of a descending spiral of unsustainable development. For example, the Asian Development Bank's report, *Emerging Asia: changes and challenges* (1997, p. 201), argues that:

Asia is the world's most polluted and environmentally degraded region [...] . The range of environmental problems is huge—from the degradation of rural land to the pollution and congestion of the region's mega cities. Some areas have unique difficulties, such as the danger that rising sea levels pose for the Pacific Islands. Some environmental problems are created locally, such as the pollution of water resources, while others are involuntarily imported from abroad, for instance, acid rain in Japan and Korea comes largely from coal burning in the People's Republic of China.

The social and economic costs of environmental degradation in the region are very high. This spiral of environmental decline and lost social and economic opportunities is reflected in the broad patterns of living conditions in Asia and the Pacific. Despite being home to some of the world's largest and fastest growing economies in countries such as Japan, Australia, New Zealand, Singapore, Taiwan and the Republic of Korea, the Asia-Pacific region is also one of great poverty. The acute impact of the 1997 economic collapse in the region is evidence of the precarious nature of the last three decades of development efforts. Thus, the Asia-Pacific region is home to over two-thirds of the world's poor and an equal percentage lack basic literacy. Population figures have doubled over the past forty years and are still on the increase, and the environmental and social effects of such numbers are beginning to take their toll. Thus, UNESCO has noted that:

By the year 2040, the population of the Asia-Pacific region is expected to have doubled to an astounding 3.3 billion people. The region is already home to 63 per cent of the world's population, with five countries alone accounting for 46 per cent of the world's population—China, India, Indonesia, Pakistan and Bangladesh. The world has never seen such growth in so short a time. By 2040 requirements for food will have doubled and the need for water and sanitation quadrupled. The consumption of energy and manufactured goods will increase fivefold, while pollution may increase up to tenfold (UNECO-PROAP, 1996).

Educational responses

Education has been identified as a critical way of addressing this range of concerns in the Asia-Pacific region. Thus, many countries in the region can point to ways in which their education systems have been responding to the challenges posed by unsustainable development. Many of their initiatives preceded the Earth Summit and are the result of the active International Environmental Education Programme led by UNESCO and the United Nations Environment Programme (UNEP). After the 1977 Intergovernmental Conference on Environmental Education in Tbilisi, follow-up workshops were held in Asia in 1980 and 1997. These provided for a range of catalytic activities, including: the exchange of information among institutions; the collection and dissemination of information; publication of materials for use in curriculum development and teacher education; study visits and attachment programmes; demonstration projects; and the development of a pool of experienced resource persons to provide consultancy services to the member countries (Gregario, 1993). The impacts of this and related programmes may be seen in the relatively high rate of adoption of forms of environmental education in schools across the region. These include: the development of curriculum guidelines and new teaching materials, the revision of syllabuses to infuse an environmental perspective, the adoption of whole-school approaches to curriculum planning for environmental education, and the establishment of specialized environmental education centres.

During the 1990s, efforts were made to integrate the concept of sustainable development into these initiatives. The basic thrust for this began with the Earth Summit and was further encouraged by the Third Ministerial Conference on Environment and Development in Asia and the Pacific, which was held in 1995 under the auspices of the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP). This meeting decided upon a five-year Regional Action Programme for 'environmentally sound and sustainable development'. Responsibility for catalysing educational reform under this plan lies with UNESCO and UNEP but several other bodies have also taken initiatives. It is too soon to see the result of these efforts, but their intention is to promote sustainable development through education and related capacity-building initiatives. For example, the UNESCO Asia-Pacific Programme of Education for All focuses on universalizing primary education and eradicating illiteracy in the region as a foundation for social and economic development. UNICEF also plays a major role in this goal. The UNESCO Asia-Pacific Programme of Educational Innovation for Development is active in the areas of: secondary education reform; education for girls, pavement dwellers and refugees; and vocational and higher education, including teacher education. These are important elements in the reorientation of mainstream education towards a sustainable future. UNEP supports the development of capacity to develop and teach courses on sustainable development issues in the region's universities through its Network for Environmental Training at the Tertiary Level in Asia.

The Association of South-East Asian Nations and the Asia-Pacific Economic Cooperation have small information, training and network programmes to support member countries, while the South Pacific Regional Environment Programme has prepared a draft *Action strategy for environmental education and training in the Pacific Region 1999–2003*. Several international NGOs are also active in supporting education strategies for sustainable development in the region. For example, the International Union for the Conservation of Nature (IUCN) supports the South and Southeast Asia Network for Environmental Education, while the World Wildlife Fund has initiated a South Asia regional co-operation framework as part of its Global Priorities for managing natural resources (IUCN/CEE, 1998). The Asia-Pacific Bureau of Adult Education has developed a framework for environmental adult education in the region in order to promote the principles of the *Treaty on Environmental Education for Sustainable Societies and Global Responsibility*, endorsed at the NGO Global Forum at the Earth Summit in 1992. Regional conferences of the Asia Environmental Council and the Asia-Pacific NGO Environmental Conference have also emphasized the importance of education in creating sustainable societies. The Environment Agency of Japan and the newly formed Institute for Global Environmental Strategies (IGES) are supporting co-operative regional efforts to promote sustainable development through education. For example, IGES has initiated a review of the policies and capacities of NGOs, the media and formal education systems in the region to promote sustainable development. As a result of initiatives such as these, many examples of innovative practice may be found across the region (Fien & Tilbury, 1996), some of which are noted here.

Australia's tradition of school-based curriculum development within broad framework syllabuses encourages local innovation and across-the-curriculum support for environmental education. A series of state policies, curriculum guidelines and support materials already exists for environmental education.

Environmental protection is a basic State policy in China. Chaozhou City was named by UNEP as one of the '500 best cities in the world' for its achievements in environmental education. Over 200,000 students in more than 1,000 schools underwent an environmental education programme that combined in-school and out-of-classroom activities.

In India, the National Policy on Education of 1968 and 1986 made environmental themes integral aspects of the curriculum. The National Council of Educational Research and Training has produced model national textbooks for Years 3–5 on environmental studies. Beyond Year 6, texts of all subjects are to include environmental education. The Supreme Court has issued a court order to ensure that all education systems promote environmental education. Environmental themes are integral to adult and non-formal education as well.

Indonesia has a network of environmental study centres in universities. Environmental education is incorporated into national policies on environmental management. Additionally, non-degree training programmes are available in environmental impact assessment and other topics. There is widespread co-operation between schools, universities and community groups in local action projects such as clean river campaigns.

Primary and secondary school subjects in Japan comprehensively cover environmental topics. There is special emphasis on the promotion of environmental education. Links between schools and administrative agencies, e.g. the Ministry of Environment and the Ministry of Education, are being developed to produce guidance notes and supplementary readers for primary and lower secondary schools, and to co-ordinate in-service education and research.

In Malaysia, 'Man and Environment' topics are integrated into five subjects in primary school (social science, health education, civics, history and geography). Schools support a wide range of co-curricular activities, e.g. nature clubs, environment week, camping and environmental education projects. There is widespread support by government agencies, NGOs and the media for environmental education.

Involvement of NGOs in environmental education is strong in New Zealand. School/university links provide special learning opportunities for teachers and students through programmes such as Eco-school and Enviro-school.

In the Philippines, environmental concepts and skills are integrated into the National Minimum Learning Competencies for elementary schools and Desired Learning Competencies for secondary schools. Strong curricular materials and professional development programmes for teachers already exist in environmental education.

At the secondary school level, environmental education in the Republic of Korea will be a separate subject. The Environmental Conservation Model School programme will provide examples of environmental education across the curriculum.

Environmental education is central in Singapore's plan to become a Model Environmental City by 2000. Environmental education is already incorporated in the academic and curriculum studies of pre-service teacher education. There are at least fifteen different governmental and non-governmental institutions that are actively involved in promoting environmental awareness and action nation-wide.

In Sri Lanka, there is a strong connection between culture/religion and the philosophy of environmental education. The National Education Commission requires schools to contribute to 'the evolution of a sustainable pattern of living'. Environmental topics are integrated into the primary and secondary curriculum. Some schools have 'Environmental Pioneer Brigades' and environmental clubs. Additionally, there is active NGO involvement in environmental education.

Environmental education is integrated into three units of the 'life experience' curriculum in Thai elementary schools. Life experience includes science, social studies, health and moral education. Community development electives in junior secondary social studies provide numerous opportunities for student participation in working to solve local environmental problems. It is hoped to have an accredited environmental park and community resource centre in every village.

Environmental education is integral to the 1991 Vietnamese National Plan on Environment and Sustainable Development. Environmental education is incorporated into three subjects in primary school (nature and society, health education and moral education) and three in secondary school (geography, biology and moral/civic education). Through inter-ministry co-operation, the National Festival of Growing Plants has been incorporated directly into the curriculum.

An analysis of the educational responses

This overview of region-wide efforts to promote sustainable development through education indicates that the emphasis thus far has been upon what might be described as the first phase of educational reform that followed the Earth Summit, i.e. the reformulation of environmental education to include issues of sustainable development. This was not a difficult task as the concept of environment in the region has always included the human element. In many cultures, nature is seen as a mother or as a teacher, and since life in most Asian societies remains predominantly rural and organized around the seasons, people can easily see that the quality of their lives is related to the sustainability of the natural world. With air and water pollution the major causes of infant mortality in the region (in that the most dangerous things a child under five can do is breathe the air and drink the water), environmental education guidelines could readily integrate the rhetoric of sustainable development. However, the wider reorientation of educational practices, systems and structures to support sustainability (the second phase of reform) has yet to be seen in the region.

As a result, several outstanding issues and problems remain. In many countries in the region, for example, most initiatives are still embedded within pre-Earth Summit conceptions of environmental education. These tend to favour nature conservation, especially through the study of science and geography, rather than the multi-disciplinary bases of sustainable development and the holistic imperatives that are served by the emerging concept of education for sustainable futures. Consequently, most initiatives to promote environmental education in the Asia-Pacific region have tended to come from ministries of environment, agriculture or natural resources rather than ministries of education. While welcome, the efforts of such ministries tend to be directed towards specific environmental issues rather than a government-wide commitment to sustainability. They also tend to concentrate upon information and awareness-raising campaigns directed at individual behavioural change rather than broader educational or sustainability goals. Indeed, sustainable development is not well understood as a concept outside limited environmentally conscious circles in most countries and, certainly, is only rarely being pursued as a whole-of-government commitment. Several countries in the region still lack national policies or guidelines for environmental education. The result of this set of problems has been a lack of coherence and long-term planning for educational approaches to sustainable development. Indeed, even in countries that have environmental education policies, very few have been revised to incorporate the broad social, economic and political, as well as conservation, aspects of sustainable development.

The general lack of interest in matters of sustainability by ministries of education has tended to marginalize environmental education from mainstream education policy. Most countries therefore lack a coherent plan for progression in environmental education from kindergarten to college. As a result, it is often not a

priority, especially where the curriculum is overcrowded. In addition, the low profile of environmental education and sustainable development in external examination subjects contributes to a lack of status for this area of learning. Therefore, it is not surprising to find that many teachers, students and parents do not perceive it as a curriculum priority. In some countries the innovative teaching methods of environmental education conflict with the traditional culture of schooling. This problem is particularly acute in countries where the curriculum emphasizes the recall of content and external examination performance rather than the development of thinking and problem-solving skills. Such problems are intensified by a general lack of awareness and support for environmental education by many education policy-makers, school administrators and academics in teacher-education institutions. This makes the introduction of both in-service and pre-service teacher education for sustainability difficult and, unfortunately, when in-service courses are provided, they tend to be attended by teachers who are already committed to environmental education. As a result, the official as well as the 'hidden' curricula of schools are often not sympathetic to the social vision of education for a sustainable future. Indeed, while the official curriculum is often deficient in these matters, the 'hidden curriculum' is often an even greater barrier to sustainable development.

The effects of this pattern may be seen in the results of an international project that investigated the environmental knowledge, attitudes and actions of over 10,000 16- and 17-year-old students in the region. This research was conducted between 1996 and 1998 and involved collaboration among university researchers in thirteen countries (Australia, Brunei, China, Fiji, India, Indonesia, Japan, New Zealand, Papua New Guinea, Philippines, Republic of Korea, Singapore and Thailand). The research was conducted in three phases: a study of the cultural background and education system in each country, questionnaire surveys and focus group interviews in each country, and a meta-analysis of the national studies (Yencken, Fien & Sykes, in press). Three key findings of the study indicate that much remains to be done to ensure that education, especially in secondary schools, is reoriented towards sustainability. These relate to: levels of student awareness and interest; the learning of appropriate concepts; and the willingness and ability of students to adopt sustainable lifestyle behaviours and to share civic responsibility for sustainable development activities.

LEVELS OF STUDENT INTEREST IN THE ENVIRONMENT

Several findings from the research indicate that young people in the Asia-Pacific region have a strong interest in learning much more about environmental matters than they are currently learning. For example, Table 1 shows that students in only one country (Singapore) wanted less frequent regular discussion of environmental matters in class. Similarly, in the focus group interviews, students from several countries reported that they had 'learnt hardly anything at all about the environment since primary school' and did not believe that it was fair for these sorts of topics to be taught only to those students who study biology or geography.

TABLE 1. Percentage of students involved, in selected Asia-Pacific cities and countries, in 'regular' discussion of environmental matters in class versus the percentage who say that they would prefer to do this regularly

	Current frequency	Desired frequency		Current frequency	Desired frequency
Australia, Brisbane	30	50	Indonesia	44	88
Australia, Melbourne	29	55	Japan	16	27
Brunei	33	59	New Zealand	19	38
China, Guangzhou	11	38	Singapore	18	3
China, Hong Kong	19	41	Thailand	14	65
India	54	79			

Source: Yencken, Fien & Sykes, in press.

APPROPRIATE CONCEPTS

The students in the survey were asked to indicate whether they were familiar with a set of eleven concepts and then to define them. Tables 2 and 3 show that the concepts students are currently learning about in school are limited to traditional concepts from biology and geography, such as renewable resources, ecology, interdependence and carbon cycle, and the two major climate change issues of ozone layer depletion and the greenhouse effect. Students reported that they were partially familiar with the concept of sustainable development but that they were not familiar at all with the related concepts of biodiversity, carrying capacity, precautionary principle and intergenerational equity. When students were asked to define this set of concepts, their knowledge scores were very disappointing. This situation points to the urgent need to integrate such concepts into syllabuses in the region so that students can begin to develop an understanding of concepts central to sustainable development. While only five such concepts were used in the survey, many others from the fields of political ecology and ecological economics could have been used. These include: ecological footprint, ecospace, natural resource accounting, life-cycle analysis, environmental assessment, eco-efficiency, sustainable consumption and so on (Organisation for Economic Co-operation and Development, 1997).

WILLINGNESS TO ADOPT A SUSTAINABLE LIFESTYLE

The third and perhaps most disheartening finding of the research was the ambivalence that the young people showed towards making lifestyle changes and practising civic responsibility in accord with their high levels of expressed concern for the environment. While the young people in every country expressed a strong desire to improve the environment, few reported a past record of active envi-

TABLE 2. Group 1 concepts: percentage of students familiar with particular concepts—relatively high level of awareness and knowledge

	Greenhouse effect	Ozone layer	Renewable resources	Ecology	Carbon cycle	Interdependence
Australia, Brisbane						
- Heard of	99	99	94	88	53	60
- Discussed in class	81	81	59	44	20	18
- Correct	24	39	59	35	44	77
Australia, Melbourne						
- Heard of	98	99	94	94	74	70
- Discussed in class	81	81	61	67	41	26
- Correct	68	36	61	50	47	—
Bali						
- Heard of	—	—	—	—	—	—
- Discussed in class	74	76	92	88	81	—
- Correct	27	47	85	80	44	—
Brunei						
- Heard of	98	99	98	90	91	71
- Discussed in class	58	57	58	51	73	20
- Correct	63	37	—	44	60	—
China, Guangzhou						
- Heard of	92	97	98	94	56	94
- Discussed in class	46	49	67	46	26	33
- Correct	7	54	70	44	40	—
China, Hong Kong						
- Heard of	98	96	98	72	47	78
- Discussed in class	59	47	56	35	18	25
- Correct	11	25	42	55	40	—
Fiji						
- Heard of	—	—	—	—	—	—
- Discussed in class	—	—	—	—	—	—
- Correct	29	45	43	42	36	—
India						
- Heard of	100	97	99	100	99	97
- Discussed in class	95	93	95	73	95	85
- Correct	67	57	51	73	50	—
Japan						
- Heard of	86	92	32	92	52	50
- Discussed in class	33	58	6	18	18	8
- Correct	48	82	10	14	26	—
Korea (Rep. of)						
- Heard of	—	—	—	—	—	—
- Discussed in class	—	—	—	—	—	—
- Correct	61	70	29	19	23	—
New Zealand						
- Heard of	95	97	91	78	75	79
- Discussed in class	64	67	60	38	50	45
- Correct	55	32	49	24	48	—
Singapore						
- Heard of	99	99	99	97	91	84
- Discussed in class	91	88	77	71	73	45
- Correct	94	75	57	59	78	—
Thailand						
- Heard of	99	99	87	99	70	98
- Discussed in class	70	69	36	69	27	32
- Correct	15	39	61	82	16	—

Source: Yencken, Fien & Sykes, in press.

TABLE 3. Group 2 concepts: percentage of students familiar with particular concepts—relatively low level of awareness and knowledge

	Sustainable development	Carrying capacity	Biodiversity	Intergenerational equity	Precautionary principle
Australia, Brisbane					
- Heard of	51	43	49	52	21
- Discussed in class	12	10	12	4	3
- Correct	26	77	82	66	21
Australia, Melbourne					
- Heard of	57	55	49	48	23
- Discussed in class	20	22	18	8	3
- Correct	26	79	79	63	19
Bali					
- Heard of	—	—	—	—	—
- Discussed in class	31	28	93	35	26
- Correct	70	64	37	82	61
Brunei					
- Heard of	54	50	57	25	37
- Discussed in class	7	9	33	3	3
- Correct	9	40	69	50	25
China, Guangzhou					
- Heard of	87	72	90	62	66
- Discussed in class	11	22	43	11	15
- Correct	53	65	50	73	55
China, Hong Kong					
- Heard of	48	52	41	44	38
- Discussed in class	9	16	12	9	8
- Correct	24	66	52	59	25
Fiji					
- Heard of	—	—	—	—	—
- Discussed in class	—	—	—	—	—
- Correct	34	49	41	46	25
India					
- Heard of	68	48	86	35	26
- Discussed in class	38	26	72	17	14
- Correct	25	39	46	71	19
Japan					
- Heard of	43	43	67	36	26
- Discussed in class	13	10	12	4	3
- Correct	49	55	24	39	20
Korea (Rep. of)					
- Heard of	—	—	—	—	—
- Discussed in class	—	—	—	—	—
- Correct	54	—	55	60	63
New Zealand					
- Heard of	47	54	50	40	31
- Discussed in class	12	13	15	8	6
- Correct	20	58	58	53	49
Singapore					
- Heard of	45	62	53	30	28
- Discussed in class	10	25	19	4	4
- Correct	19	22	86	66	32
Thailand					
- Heard of	34	95	90	94	96
- Discussed in class	6	55	39	25	25
- Correct	60	70	68	64	14

Source: Yencken, Fien & Sykes, in press

ronmental citizenship or a willingness to work for environmental protection in the future. Recycling and reusing, choosing household products that are better for the environment and reducing water consumption were cited as regular activities by some students and some also said that they had taken part in tree planting and clean-up campaigns. However, only a very small minority of young people in any of the countries said that they had written letters, signed petitions, attended meetings or made formal complaints. These 'political' actions are also the actions that most said that they would not consider taking in the future. This is despite the fact that a large majority of respondents (between 70% and 94%) in all countries stated that they felt 'positive' or 'really good' when they took pro-environmental actions and that they generally experienced positive reactions and strong support from others involved, their teachers and their immediate families.

This paradox cannot be easily explained. There are many cultural and political barriers to Western styles of active citizenship in several counties in the Asia-Pacific region. However, there is a strong indication in the survey findings that the nature of common educational experiences also plays an influential role. For example, most young people said that they had poor skills and knowledge for bringing about environmental improvements, even if in only a small way. When they were asked to rate their knowledge and skills in this area, the highest response in all countries was only a medium ranking. Indeed, students in all the countries studied said that the two most common reasons for not acting in an environmentally friendly way were beliefs that their actions would not make a difference, and that there was no practical alternative even when they knew that what they did was wrong. This reflects not only a lack of knowledge of possible alternatives but also a failure of schools to provide students with experiences that teach such knowledge and skills. It also indicates that students have rarely had the opportunity to work with others on practical environmental projects and develop confidence in their individual and collective abilities to successfully bring about change.

A reaffirmation of the contribution of education to active citizenship would mean that one of the central goals of education would be to help students learn how to identify elements of unsustainable development that concern them and to address them. This would involve students learning to reflect critically on their place in the world and considering what sustainability means to them and their communities. It would also involve practice in envisioning alternative ways of development and living, evaluating alternative visions, learning how to negotiate and justify choices between visions, making plans for achieving desired ones, and participating in community actions to put such visions into effect. These are the abilities that Jensen and Schnack (1997) describe as 'action competence'. Democratic action competence is the opposite of predetermined behavioural change as a goal for education and aligns education for sustainability as part of the process of building an informed, concerned and active civil society. In this way, education for sustainability can contribute to education for democracy.

Reorienting education towards a sustainable future: the importance of teacher education

This situation indicates the need for a revision of the objectives and content themes of school curricula in the region so that sustainability is a central concern, and teaching and learning processes emphasize appropriate concepts: learning how to learn, civic mindedness, and the motivation and abilities to work with others to help build a sustainable future. This is not a small task for, as Smyth (1995, p. 18) has remarked, 'It is difficult to avoid the conclusion that many have reached that education should be largely recast' when the wide scope of the task of reorienting education towards sustainability is considered. This will require a realignment of the major foci of education. Schools have the role of both empowering students to play an informed and active role as members of society and encouraging the politically endorsed (and mostly economically motivated) values, practices and institutions of the existing social order. These are not mutually exclusive roles, and education is designed to promote both. However, without a whole-of-government commitment to sustainable development in most countries, schools have tended to reproduce an unsustainable culture that intensifies environment and development problems rather than one that empowers citizens to work towards their solution.

This situation of unbalanced priorities calls for a reaffirmation of the role of education in building civil society by helping students:

- develop criteria for determining what is best to conserve in their cultural, economic and natural heritage;
- discern values and strategies for creating sustainability in their local communities; and
- work with others to build sustainability outwards to include national and global contexts.

This is not to say that the economic imperatives that underlie the reproductive functions of formal education are to be ignored. Economically sound, ecologically sustainable and socially just forms of development are to be encouraged; indeed, appropriate development is a core principle of a sustainable society. However, a reorientation of education towards sustainability calls attention to the problematical effects of inappropriate development and unfettered economic growth, and also to the ways that these are perpetuated through dominant patterns of schooling and the narrow and limited range of knowledge, attitudes and skills students tend to learn as a result.

Curricular reforms flowing from a reorientation of education towards sustainability need to be supported by reforms to many current patterns of curriculum development and assessment in the Asia-Pacific region. For example, the centralized control of teaching and learning through nationally mandated syllabuses, textbooks and assessment in many countries does not readily support the localization of curriculum themes or encourage student participation in local community projects. These reforms also require new attitudes and skills among teachers. This makes teacher education an especially important area for action.

Our common future, the Report of the World Commission on Environment and Development (1987, p. xiv) states that 'the world's teachers [...] have a crucial role to play' in helping to bring about 'the extensive social changes' needed for a sustainable future. For teachers to play this role successfully they need to be committed to the principles of education for sustainability; without this commitment, they may lack the skills, insights and desire to ensure that their students are provided with opportunities to learn how to contribute to the transition to sustainability. Thus, teacher education for sustainability has been the theme of a major UNESCO project in the Asia-Pacific region.

The project 'Learning for a sustainable environment—innovations in teacher education' began in 1994 in order to help teacher educators in the region include the principles and innovative teaching and learning strategies of education for sustainability in their programmes. Regional and sub-regional meetings in 1993 and 1994, convened by UNESCO and the South-East Asia Ministers of Education Association, provided the necessary needs analysis and direction for the project. These indicated that the project should focus on the personal and professional development of teacher educators, rather than on the production of resources, in order to encourage appropriate pedagogical practice.

Thus, the primary aim of the project was to support teacher educators in the Asia-Pacific region as they developed locally relevant ways of rethinking their courses and made plans to reorient teacher education in their colleges and countries towards sustainability. The project developed an action research network of teacher educators across twenty countries in the region. The purpose of the network was—and remains—to support teacher educators who wished to share in writing carefully researched, evaluated and culturally sensitive modules for use in initial pre-service and continuing in-service teacher-education programmes.

Evaluation reports indicate that the major outcome of the network has been the professional development of those involved and a series of national workshops and networks in many countries in the region (National Institute for Educational Research, 1996; Fien, in press). An attractive professional development guide has also been published (Fien, Heck & Ferreira, 1997). Containing edited selections from the most interesting and innovative work completed by the network, the modules in this guide are not seen as a finished product but as an inspiration for further adaptation in different countries. Some evidence of the success of this project includes:

- Publication of an Internet version of the guide at: www.ens.gu.edu.au/ciree/LSE/index.html;
- Adaptation of the modules and translation (*) of some or all modules in India, Pakistan, Indonesia,* Thailand,* Viet Nam,* Singapore, Malaysia,* Philippines, New Zealand, Hong Kong (Province of China), Taiwan* and Fiji;
- Adaptation of the modules in India for use in a professional development programme for seventy teacher colleges in Karnataka state;
- Adaptation (and translation) of the modules to suit nursing education by the staff of the national Department of Health in Thailand;

- Adaptation and use of modules in masters courses in Thailand, Australia, New Zealand and Japan;
- Adaptation and use of modules in a professional development guide and training programme on Coastal and Marine Studies in Australia; and
- Adaptation of some of the modules for a UNESCO multimedia teacher-education programme for teachers called *Teaching and learning for a sustainable future*.

Conclusion

The second phase of education for a sustainable future (the widespread reorientation of educational practices, systems and structures) is not yet widespread in the Asia-Pacific region. This is a very large undertaking and one that the economically wealthy regions of the world have yet to make. Therefore it is not surprising that one of the world's economically poorer regions has yet to enact such reforms. However, there is sufficient leadership in the region (in the form of international and regional agencies and active NGOs) to indicate that if Member States can be convinced that a whole-of-government approach to sustainable development is desirable, the teacher educators, curriculum development officials and teachers of the region will have the requisite support to make the necessary reforms.

References

- Asian Development Bank. 1997. *Emerging Asia: changes and challenges*. Manila, Asian Development Bank.
- Brown, L.R., et al. 1999. *State of the world 1999: the millennium edition*. New York, World Watch Institute, Norton & Company.
- Fien, J., ed. In press. *The Action Research Network and international collaboration in higher education: a case study from environmental education in teacher education*. Bangkok, UNESCO Principal Regional Office for Asia and the Pacific (PROAP).
- Fien, J.; Heck, D.; Ferreira, J., eds. 1997. *Learning for a sustainable environment: a professional development manual for teacher educator*. Bangkok, UNESCO Asia-Pacific Programme of Educational Innovation for Development (ACEID).
- Fien, J.; Tilbury, D. 1996. *Learning for a sustainable environment: an agenda for teacher education in Asia and the Pacific*. Bangkok, UNESCO Asia-Pacific Programme of Educational Innovation for Development (ACEID).
- Gregario, L. 1993. *UNESCO initiatives in environmental education for Asia and the Pacific*. Unpublished briefing paper for International Experts Meeting on Overcoming the Barriers to Environmental Education through Teacher Education, Griffith University.
- International Union for the Conservation of Nature. Centre for Environmental Education. 1998. *SASEANEE circular*, vol. 16, no. 1.
- Jensen, B.B.; Schnack, K. 1997. The action competence approach in environmental education. *Environmental education research* (Abingdon, UK), vol. 3, no. 2, p. 163–78.
- National Institute for Educational Research. 1996. *Learning for a sustainable environment: environmental education and teacher education in Asia and the Pacific*. Tokyo, NIER.

- Organisation for Economic Co-operation and Development. 1997. *Sustainable consumption and production: clarifying the concepts*. Paris, OECD.
- Smyth, J. 1995. Environment and education: a view of a changing scene. *Environmental education research* (Abingdon, UK), vol. 1, no. 1, p. 3–20.
- United Nations Development Programme. 1998. *Human development report 1998*. New York, Oxford University Press.
- United Nations Environment Programme. 1997. *Global environmental outlook*. New York, Oxford University Press.
- UNESCO-PROAP. 1996. *Celebrating diversity, cultivating development, creating our future together: UNESCO in Asia and the Pacific*. Bangkok, UNESCO.
- World Bank. 1993. *Toward an environmental strategy for Asia*. Washington, DC, World Bank. (Discussion Paper no. 224.)
- . 1998. *World development report 1998–99*. New York, Oxford University Press.
- World Commission on Environment and Development. 1987. *Our common future*. New York, Oxford University Press.
- World Resources Institute. 1998. *World resources 1998–99*. New York, Oxford University Press.
- World Watch Institute. 1998. <http://www.worldwatch.org/index.html>
- World Wide Fund for Nature. 1999. <http://panda.org/livingplanet/lpr/index.htm>
- Yencken, D.; Fien, J; Sykes, H. In press. *Environment, education and society in the Asia-Pacific region: local traditions and global discourse*. London, Routledge.

EDUCATION FOR SUSTAINABLE DEVELOPMENT

EDUCATIONAL REFORM AND

SUSTAINABLE DEVELOPMENT

IN THE AMERICAS

Beatrice Edwards

Introduction

Three decades have passed since social scientists in the Americas began to suggest that sustained or increasing rates of national economic growth did not necessarily constitute development or signify generalized improvements in living standards. In his book *Capitalism and underdevelopment in Latin America*, published in 1967, Andre Gunder Frank first challenged Walt Rostow's modernization theory, which assumed this association and had been widely accepted as the universal path of national socio-economic change. Gunder Frank made the observation that, like development, underdevelopment is a process rather than a condition, and that both processes occur in concert, each one the reflection of the other. Gunder Frank went on to say that these dual phenomena advanced not only among countries but also within them: while some regions progress and prosper, others wither and lose population, resources and dynamism. As Gunder Frank himself pointed out, neither observation was completely original; Joseph Schumpeter had remarked the same

Original language: English

Beatrice Edwards (United States of America)

Senior Specialist in Education at the Organization of American States in Washington, DC. Her work focuses on educational reform in Latin America, environmental education and technical/vocational education. She is the author of numerous articles on these subjects, and holds a Ph.D. in sociology from American University, Washington, DC, where she teaches as an adjunct professor. E-mail: Bedwards@oas.org

restlessness in the economic system many years earlier and called it 'creative destruction'. Gunder Frank's contribution to the discussion was his argument that the two processes were intimately related and that one region developed at the expense of another, siphoning away the elements required to sustain growth and change. One area developed by 'underdeveloping' another. In his view, underdevelopment was not the natural state that prevailed prior to industrialization and urbanization. Rather, it was a complex course of change that occurred when the internal impulses of a social formation were overcome by external socio-economic forces and subordinated to them. Although he never introduced environmental considerations into his analyses, implicitly they were there. By linking underdevelopment to development itself, Gunder Frank reconceptualized the overall process, transforming it from the single-track trajectory of infinite possibilities envisioned by Rostow to a permanently unequal relationship between the central countries and the peripheral ones. In an underdeveloped country, then, the growth of a market economy could occur, together with the social stratification characteristic of industrialized and urbanized societies. Instead of developing, however, the subordinate country would underdevelop, causing extremes of stratification and social disorganization in countries at the periphery, completely unknown to those at the centre. In short, Gunder Frank implied that true development must respond to the internal logic of a social formation, as emergent from its own material foundations, its systems of production, its history and its culture.

Debate about the Rostovian view of infinite possibilities and Gunder Frank's conception of underdevelopment-constrained-by-development continues in the international community. The competing views have implicitly framed the overall discussion of technical co-operation between North and South, as well as policy discussions, sector by sector. The construction of the concept of 'sustainable development', which emerged from the debate surrounding the role of the natural environment in the process of social change, represented a compromise between the two opposing visions. Qualifying development as 'sustainable' implied that non-sustainable policies and programmes did exist and that their principal feature was the depletion of the resources—both natural and cultural—required to implement them. Development, as Gunder Frank argued, did not always represent a positive and permanent change for everyone. As a compromise concept, however, sustainable development assumed (as Rostow had) that the stage of operations was a single and unified world and that the present generation as a whole was the sole central actor. It did not recognize a world divided by regions, nations and social classes, or already structured by history and conflict.

In describing here the changes in the educational sector over the past fifteen years and the continuing definition of the concept of sustainable development, we will once again make reference to these views. We will show how the unresolved debate about the content and meaning of sustainable development now affects the reform of education systems, North and South, raising questions about the appropriate approach to school reform and the place of the school in relation to its cultural and physical environment.

Sustainable development: the political context

Since he formulated his theory, Gunder Frank has gone on to refine his analyses, but not before he was severely criticized from both the right and the left. The right denounced him for suggesting that the poverty, inequality and political instability of the Third World were the 'fault' of the industrialized First World, and the left criticized him for analysing in spatial/national terms a conflict that could be more usefully discussed in terms of social classes. In this polemical context, concern about the deteriorating natural environment increased in the hemisphere, and ecological imbalance attracted greater political attention as it grew more and more evident. For some in Latin America, the increasing loss of ecological equilibrium was the reflection in the natural world of extremes of wealth and poverty in the socio-economic sphere, and both were the inevitable result of unequal and dependent development—or underdevelopment.

Both North and South America were well represented at the United Nations Conference on the Human Environment at Stockholm in 1972, where the inter-regional conflict broke into the open. The Brazilian delegation presented proposition 2849, which held industrialized countries responsible for environmental contamination and urged them to finance in poor countries the measures now necessary to support the clean-up initiatives adopted and promoted by rich ones. The Plan of Action ultimately endorsed by the international community at Stockholm represented a compromise: while establishing a holistic theoretical framework in which dependent international relations and conflict between social groups were obscured, the plan recognized a link between social inequality and ecological disequilibrium. On the one hand, the Human Environment Declaration signed at Stockholm explicitly applied the phrase 'sustainable development', and identified the obligation to protect the natural environment for present and future generations. This idea about the limits of natural elements had never before been convincingly asserted in the Americas, where, in contrast to Europe, expanses of land, forests and water had seemed to be virtually infinite for so long. On the other hand, by focusing on an intergenerational trust rather than an international one, the Declaration represented the conflict over limited resources as if it existed only in time, ignoring the entire controversy surrounding development and under development, wealth and poverty.

Five years later, at Tbilisi, governments that had joined the United Nations Environmental Programme (UNEP) began a specific discussion concerning environmental education based on the Stockholm Declaration. As such, the statements from Tbilisi defined environmental education more broadly than ever before, opening the curriculum to considerations of social inequality as well as ecological imbalance. When UNEP established in 1981 the Network for Environmental Education for the Americas, it created a forum for the ongoing discussion and study of these issues, which would continue to be seen and analysed through an adversarial North-South perspective.

This explicit antagonism was at least partially overcome when the Brundtland Commission published *Our common future*, its report on sustainable development. The Commission elaborated on the idea that social equity and environmental protection hold a legitimate place in any concept of development, while pointing out the inevitable reductionism implicit in the purely economic and technological approaches. The report concluded that the growing inequality between rich and poor countries represented the planet's principal environmental problem as well as its major development challenge. At the same time, *Our common future* asserted with optimism that universal economic growth and the alleviation of poverty in developing countries were compatible. At no time did the Commission suggest that economic growth might not be the universal solution to problems of poverty and environmental degradation, nor did it ever indicate that alternative models of development might be identified and pursued. In a sense, the report concluded in one chapter with the position it had critiqued in another: economic growth and greater technological efficiency would set social and ecological disturbances right.

At the 1992 United Nations Conference on Environment and Development, held in Rio de Janeiro, the scene was replayed. Delegations from the developed countries continued to identify measures developing countries should undertake to contain environmental destruction at the national level, while delegations from developing countries sought international financing for the implementation of these measures. And four years later at the Summit Conference on Sustainable Development for the Americas held in Santa Cruz de la Sierra, Bolivia, the debate continued. The United States wished to confine the agenda to a discussion of the scientific and technological aspects of development alone, while Latin American and Caribbean alliances sought to open it to the analysis of socio-economic, political and cultural issues. Nor has the debate ended in the hemisphere, where conflicting perspectives on the content of the term 'sustainable development' continue to compete. As a result, it is difficult to sketch a uniform approach to education for sustainable development in the region because approaches and perspectives vary so widely between the subregions.

Southern and Northern schools of thought

Despite the variety, two recognizable approaches to education and sustainable development can be identified for analytical purposes. The Economic Commission for Latin America and the Caribbean (ECLAC), established by the United Nations, identified early on a relationship between environmental processes and development. Under the direction of Oswaldo Sunkel, ECLAC drew many Latin American scientists together to publish their views in *Estilos de desarrollo y medio ambiente en América Latina y el Caribe* [Types of development and environment in Latin America and the Caribbean]. The ECLAC school argued that the natural biophysical resource context of Latin America formed a conditioning framework for the historical development that occurred in the region after the Conquest. The school also believed that the colonial and later the dominant international powers exerted a definitive influ-

ence on the trajectory of social change that took place in Latin America over time. Thus, the natural environment, an interface of cultures and the international economic system worked together to shape a development path that had been especially polarizing to society and destructive to nature. The defining fact of Latin American development from the colonial era to the Second World War, they argued, was the export of the economic surplus resulting from the exploitation of natural resources—many of them non-renewable—and cheap labour. After the Second World War, the picture became more complex when industrialization and urbanization accelerated, and policy decisions were taken by Latin American elites that aborted the potential expansion of middle- and lower-income markets in cities. The new strategies promoted the local reproduction of industrialization patterns imported from the North through closer association with transnational corporations. The larger Latin American economies, encouraged by their transnational partners, concentrated on building the automobile and petrochemical industries, as well as their capacity to manufacture consumer durables, electronic goods, and pulp and paper products. These choices had negative effects on the natural environment because industry came to depend on heavy technology and abundant energy (oil) as inputs for industrialization. To a large degree, both had to be imported. As a consequence, Latin American governments encouraged the growth of commercial monocultural production in the countryside in order to produce the exports necessary to fund the import bill. Agricultural production, in turn, became more inequitable as the large commercial plantations grew, pushing small producers onto marginal plots, and applying fertilizers, herbicides and pesticides to ever greater extensions of land.

Commercial, mechanized agriculture expelled enormous numbers of workers from rural occupations after the 1950s, who migrated to cities where energy-intensive industry provided insufficient numbers of jobs in the formal sector. Unable to work in the formal sector, millions worked as casual labour or created employment at low levels of both remuneration and productivity. The result, as Sunkel described it, was heavily overcrowded urban areas, where people subsisted under the worst possible environmental conditions.¹ For the majority of the rural population which remained in the countryside, conditions were worse still.

Since Sunkel wrote in the 1970s and 1980s, the inequities in standards of living that he analysed have not only persisted, but they have worsened. In 1980, the richest 1% of the Latin American population earned on average 237 times the income of the poorest, but by 1995, the gap had increased to a factor of 417.² The degree of polarization in Latin America, which was already the sharpest in the world in the 1970s, has thus increased significantly at the extremes of the income distribution during the past fifteen years. Currently, ECLAC estimates that by the year 2000, more than 200 million people will be living in poverty in the region. Of these, approximately 40% will live in extreme poverty, i.e. they will subsist on less than one dollar per day. Over time, then, problems associated with underdevelopment, such as these glaring inequities in income distribution, have not been mitigated by economic growth. Given the persistence of poverty, as well as its increasing depth and dimensions, it is understandable that Latin American educators tend to integrate envi-

ronmental education and social and economic policy concerns into a single analysis. Under the circumstances, it makes little sense to see regional environmental problems as a consequence of a lack of conservation of natural phenomena alone. For educators, whatever they teach, must work through schools, and schools cannot help but be affected by such dramatic social inequalities.

In the North, however, and primarily in the United States, the prevailing school of thought did not conceive sustainable development so broadly. In fact, culturally, historically and economically, North Americans did not tend to think of their societies as 'developing' according to any specific overall policy or plan at all. The growth of the economies of the United States and Canada had been more a process of evolution than one of implantation, and so the shifts and accelerations that occurred over the course of time did not have the radically dislocating effects that these same changes caused in Latin America and the Caribbean. Moreover, those who suffered comparable deprivation or dispossession in North America did not have a national elite to speak for them. Acknowledgement of widespread poverty in the North would compromise national elites, who could not attribute inequities to international economic forces because of their own dominant role in the global economy.

The governments of North America, with their strong attachment to quantitative economic growth and their desire to avoid redistributive questions, adopted a conservationist approach, oriented towards the study of natural, 'ecological' phenomena. Their policies tended to isolate environmental issues from social ones, and as a result, environmental education in the North became increasingly focused on 'nature', excluding questions of social inequity from its field of study. Rather than addressing ecological disruption in transdisciplinary terms, however, this approach obscured the relationship between the social and natural worlds and delivered the issue of ecological disturbance to technical experts. In the North, ecological disorder became a strictly technical rather than a broad-based political problem.

Critics argue that this conception of the issue has had several fundamental implications for educational processes and environmental activism in the North.³ An over-emphasis on technical remedies has led citizens to question the usefulness of their participation in environmental debates and to believe that scientists and bureaucrats are better qualified to deal with such questions. Additionally, opponents of this view suggest that leaving analysis and decision-making to technocracies imposes the protocols of strict positivistic analysis on the discussion of environmental questions. Within the framework of such analysis, there tends to be a bias towards identifying uniform natural processes because these are the phenomena most accessible to the traditional tools of positivism: they lend themselves to quantitative measurement and comparisons, calculations of probabilities, etc. Catastrophic events, which by definition occur only sporadically, do not reveal themselves *a priori* to this type of study. Nor can this approach anticipate an event before it occurs. The approach applies only after the phenomenon already exists; once a body of water is contaminated, the degree of contamination can be monitored for increased or decreased pollution levels. Contamination itself, however, cannot be anticipated and prevented. Moreover, because the approach favours the 'math-

ematization' of knowledge and experience, the use of controlled experimental proofs, and the opinions of technical experts, it promotes a specific type of schooling that fails to emphasize interdisciplinary critical thinking.

Both the integrated approach of Latin American environmental thought and the disciplinary context of North American environmental education grow out of their respective social and cultural histories and already demonstrate a certain institutional permanence that makes them difficult to reconcile. Many North American programmes of study at the university and post-graduate levels are long established; they structurally separate the natural from the social sciences, the 'technical' from the 'humanistic'. Moreover, because of its socio-economic dominance in the region, the North is well placed to export expectations and curricula for environmental education, as well as definitions of sustainable development, to Latin America and the Caribbean. In fact, as the entire region implements educational reforms throughout the formal school systems, the tendency to export policy from the North and import it in the South presents both an opportunity for more autonomous and sustainable development and the danger of Gunder Frank's continuing underdevelopment, this time in the educational sector.

Educational reform: North and South

As early as the 1980s, educational reforms got underway in some of the countries in the hemisphere. In 1983, the United States Department of Education sounded the alarm with the publication of *A nation at risk: the imperative for educational reform*, which identified the risk facing the United States in terms of the demands globalization would soon make on the national economy and labour force:

History is not kind to idlers. The time is long past when America's destiny was assured simply by an abundance of natural resources and inexhaustible human enthusiasm, and by our relative isolation from the malignant problems of older civilizations. The world is indeed one global village. We live among determined, well-educated, and strongly motivated competitors. We compete with them for international standing and markets, not only with products but also with the ideas of our laboratories and neighbourhood workshops. America's position in the world may once have been reasonably secure with only a few exceptionally well-trained men and women. It is no longer.

The risk is not only that the Japanese make automobiles more efficiently than Americans and have government subsidies for development and export. It is not just that the South Koreans recently built the world's most efficient steel mill, or that American machine tools, once the pride of the world, are being displaced by German products. It is also that these developments signify a redistribution of trained capability throughout the globe. Knowledge, learning, information, and skilled intelligence are the new raw materials of international commerce and are today spreading throughout the world as vigorously as miracle drugs, synthetic fertilizers, and blue jeans did earlier. If only to keep and improve on the slim competitive edge we still retain in world markets, we must dedicate ourselves to the reform of our educational system for the benefit of all—old and young alike, affluent and poor, majority and minority. Learning is the indispensable investment required for success in the 'information age' we are entering.⁴

By the early 1990s, the reforms were already well advanced, not only in the United States, but throughout the hemisphere. Further, in Latin America and the Caribbean, educational reform measures had taken on a relatively uniform character, as designed by the World Bank and the Inter-American Development Bank (IDB), which provided the loans that financed them. Among the aspects of reform frequently adopted and implemented were sectoral restructuring, standardized educational content and materials, quality assessment systems and decentralized administration. Generally applied, these transformations conform closely to the international agenda promoting economic integration in the Americas and thus to the expanding need to 'marketize' all social and cultural activities financed by government. In their application, the reforms attempted to reconstruct education as an 'enterprise', which tends to see teachers, students and schools in terms of individually competitive performances.

Diagnostic studies executed by both the World Bank and the IDB, development agencies and governments showed not only the shortcomings of existing formal school systems but also the changed context in which students were to be produced. Experts argued that an emerging model of development placed more complex demands upon the State, the citizen and the student. Open economies exposed previously protected economic activity to competition abroad, and newly consolidated democratic systems in Latin America demanded better-informed, more autonomous citizens capable of assuming the responsibilities of civic participation. Repeatedly, studies showed that, as structured, education systems in the Americas did not provide the skills and knowledge required by the increasingly competitive and complicated world. Latin American public schools, too, were discovered to be under-financed, lacking in quality, under-equipped, inequitable and incapable of supplying the human resources required for economic growth.⁵

While discussion, pilot projects and evaluation continue in the United States concerning the specifics of reforms in public education, the measures financed by the development banks and agencies and applied regionally were little debated publicly. They tend to reflect quite concretely the market-oriented perspective for reforming public schools in the United States, which ironically has encountered formidable resistance at home. These measures adopt a commodified view of education, at the same time as they promote high moral standards and non-commodified values, such as co-operation and altruism. Critics of this approach to reform question the applicability of these measures by implicitly referring to Gunder Frank's conception of development and international relations. How effective are socio-economic measures designed in one context when they are applied in another? Will they have the intended effects and can they be sustained? If they are unequivocally beneficial, why is there such resistance to their application in the country where they were devised? Table 1 shows selected major features of the educational reforms currently under implementation in Latin America. As evidenced in the table, many of the reform measures are similar from country to country.

It is quite clear that, while the reform measures widely applied in Latin America and the Caribbean may correspond to the needs of school systems throughout the

TABLE 1. Educational reform in seven countries in the region, 1996

Objectives	Implementation (number of countries)	Objectives	Implementation (number of countries)
<i>Sector structure</i>		<i>Teachers</i>	
Increased coverage— distance education	6	Increased salaries	3
Extended school day	4	Training programmes	4
<i>Educational content</i>		<i>Targeted supplemental programmes</i>	
Curriculum reform	4		4
Information technology initiatives	6		
<i>Evaluation</i>		<i>Decentralization</i>	
Use of quality measures	6	Decreased cost of educational units	4
		Decentralized administration (subnational entities) — private management	3
		Promotion of community involvement	3

Note: The seven countries are Bolivia, Chile, Colombia, Costa Rica, Paraguay, Peru and Uruguay.

Source: United Nations/ECLAC, *La brecha de la equidad. América Latina, el Caribe y la cumbre social* [The equity gap: Latin America, the Caribbean and the upper classes], São Paulo, Brazil, 1997.

Americas, they respond primarily to the beliefs of a technically oriented middle class in the United States. This class relies on principles of cost-accountability, quantitative measurement and organizational management in occupational settings where most participants are equally prepared to compete.⁶ The IDB, for example, in its 1996 report *Economic and social progress in Latin America*, adopted this technical-administrative perspective explicitly:

Lack of information on the performance of educational systems is a by-product of the problems of organization. The lack of tests and measurements of cost-effectiveness in some sense is convenient for both administrators of the system and teachers. They thereby remain protected from pressures to be accountable for the performance of the system. Proper management of the educational sector thereby becomes less likely.⁷

The study then suggests that governments should broaden their role in educational financing through more efficient allocation of resources. According to the report, a public monopoly has provided educational services in Latin America and the

Caribbean for the past three decades or more. The expansion of public school coverage diminished the participation of the private sector in the provision of these services, without supplying adequate access to education of sufficient quality. Education, then, has been something like a protected industry in the region, and just as productivity in industry increases when exposed to competition, so also should educational performance. In fact, this assessment of challenges for the educational sector reads much like a diagnostic study of the ills affecting State enterprises in general.

The 1996 IDB report points out that decision-making structures are highly centralized and depend directly on public financing from central governments. At the same time, this centralization does not guarantee either adequate service or equity in schooling. This lack of quality in the product of education is a function of the budgeting system, the report argues, which allocates funds on the basis of the cost of inputs rather than on the value of services provided.

This procedure for allocating resources based on their historic supply breaks any link between output and income, and hence service providers have no incentives to increase either the quantity or the quality of their service. Since inputs are received independently of productivity, there are no incentives for a school principal to strive to increase coverage in his or her zone or to improve the quality of education imparted.⁸

Again, many of the assumptions and principles behind this type of reform seem particularly well suited to the expectations and skills of the middle class of the United States. Middle-class parents in the United States, for example, have long experience in making comparative and complex market assessments for the purpose of finding a service provider whose work and goods represent the highest quality for the lowest cost. They make such determinations when buying a house or a car, choosing a plumber, finding a pharmacy, etc. In the context of their lives, where discretionary income does exist, although it is not abundant, this type of 'choice' seems logical, efficient and desirable.

In a curious twist, the decentralized, partially privatized approach to educational services, apparently developed to suit this particular politically important social group in the United States, has never been successfully implemented there on a large scale. Recently, a state court disallowed the use of public monies to fund private education, casting doubt on the future use of school vouchers. Strong opposition from teachers' unions, the Democratic presidential administration and the United States Department of Education has effectively stymied multiple attempts to make public funds widely available to private schools. Extensive research has failed to demonstrate convincingly that privately operated schools, by virtue of being private, are superior to public ones. In a widely discussed national assessment, conclusions showed that differences in achievement scores between public and private school students had little to do with the structure of the schools themselves and were fundamentally a function of differences in the socio-economic status of the students' families.⁹ A system of financing education through the provision of publicly funded vouchers for use in private schools is well established in Chile, however, and in many other Latin American

and Caribbean countries, official acceptance of the need for an infrastructure that can transform education into a market-driven public service is widespread.¹⁰ Nevertheless, teachers and administrators in the region question whether educational reform can be sustained and can contribute to sustainable development if uniform policies are formulated abroad and applied to schools as isolated institutions, without accounting for the culture of those who attend them, or the social structure that surrounds them.

As discussed earlier, the political importance of forces in the United States opposed to market-driven education has prevented the application of nationally standardized tests, the implementation of large-scale voucher programmes and the establishment of a direct relationship between school performance and school financing. Policy-makers in the international community, however, have accepted the commodified version of educational reform. But this approach, both generated and resisted in the North, bears little relation to the vision of environmental education for sustainable development formulated in the South.

Environmental education for sustainable development

Because of their federal education systems, in neither Canada nor the United States do national curricula or legislation requiring environmental education exist. To the extent that environmental considerations are incorporated into the curricula of primary and secondary schools, they are mandated at the state and local levels only. For many Latin American and Caribbean countries, in contrast, national governments have legislated requirements for both primary and secondary schools regarding environmental education.

The Secretariat for Public Education in Mexico, for example, requires primary schools to include certain opposing views in the curricula of primary schools. All public schools should study: (a) the simplistic vs. the complex view of the environment; (b) the environment as an inventory of natural resources vs. a dynamic system; (c) ecosystems of equivalent importance vs. a hierarchy of ecological dominance; and (d) rural vs. urban environments. Although information is scarce, Costa Rica, Honduras, Venezuela, Colombia, Chile, Ecuador, Bolivia, Cuba and the Caribbean Community (CARICOM) countries all have some form of legislation defining the role of environmental issues in the curriculum of public schools. It is not clear, however, to what extent the legislation is actually implemented.¹¹

At the university level, a clear line of thought is specific to the Latin American region. It was articulated at the First International Meeting on the University and Environment in Latin America and the Caribbean, convened jointly by UNEP and UNESCO in Bogotá in 1985. At the meeting, participants discussed two important papers: *The ten theses on environment in Latin America* and *The Bogota charter on the university and the environment*. Both papers articulated a view of environmental education and sustainable development that integrated the natural and the social sciences and rejected the import of the market-driven North American development style.

The environment is seen as a potential for alternative egalitarian and sustainable development, based on the integrated management of its ecological, technological and cultural resources. This conception contrasts with the prevailing idea, that conceptualizes the environment as a restrictive factor or as an available natural resource, the degradation of which would be the unavoidable cost of development. Thus, Latin America has produced an original and indigenous school of thought where environmental issues are concerned.¹²

The participants at the meeting were especially concerned that Latin America gain regional autonomy in choosing a development path and saw education as an important part of achieving this objective.

The incorporation of the environmental dimension into higher education requires restatement of the role the University plays in society and in the contemporary world order that frames Latin American and Caribbean reality. The University's significance and function as a laboratory for specific regional conditions of contemporary reality in the world context must be stressed.

...

Incorporation of the environmental issue into the university's functions and the internationalization of the environmental dimension in the production of knowledge, poses again the issue of interdisciplinary themes that force us to transcend earlier pluridisciplinary efforts and methods. Among these questions is the need to decentralize both political power and economic processes, on the basis of environmental criteria, in order to encourage a more environmentally balanced regional process of sustainable development which, in this context, allows for a more democratic management of productive resources. Therein, global and complex problems would be addressed, such as the rationality of productive processes, the food-related problems of our peoples, the integrated management of our resources, the fulfilment of the basic needs of the population and the improvement of their quality of life.¹³

The position taken asserts that the historical and biological reality of Latin America is fundamentally distinct from that of North America, and that educational processes have a responsibility to reflect this. The rationality of this position is hard to dismiss, once one accepts that a basic relationship exists between the social and the natural worlds. But this link is precisely the phenomenon denied by the market-oriented educational reforms implemented over the course of the past fifteen years or so.

According to its proponents, the logic of the market, after all, is universal, inherent in human nature and in nature itself. All creatures naturally compete for scarce resources to ensure their survival and maximize their comfort at minimal cost. Classical economics is not specific in space or time for those who believe in it. The problem for the theory in this context is how to explain the consistently different histories and cultures of different parts of the world if all creatures act according to the same inborn impulses and are uninfluenced by any other significant forces.

From as long ago as ECLAC in the 1970s comes a response: other impulses and forces do exist that are as equally powerful as market dynamics, and the natural environment is one of them. Further, when environmental educators of this

school speak of the environment, they refer to it not as a set of resources, but as a dynamic system of interrelated and self-sustaining elements, including cultural ones. According to some, it is ignoring this fact that underlies the deformity called underdevelopment. If underdevelopment is to be transformed into sustainable development, the specifics of regional histories and cultures cannot be neglected. A society's endogenous productive potential will be squandered if it is made to produce according to imported models of technology, industry and agriculture.

Conclusions

The educational reforms discussed here can, if applied without caution and adaptation, result in further deformity, further underdevelopment. They can easily lead to greater inequities when applied in a socio-economic setting already characterized by extremes of wealth and poverty. Policy-makers should look seriously at the socio-economic environment of a school or school system when intervening, and not simply examine the organizational features of a successful school and attempt to replicate them elsewhere with market incentives. As an example of the negative possibilities, consider the implications of distance education. While in the abstract, distance education technology may expand access to learning, a report released by the College Board in the United States shows that it also has the potential to exclude poor students. 'Information "have-nots"—those with limited or no access to computers and the Internet—are at a distinct disadvantage when it comes to taking courses on-line. [...] While education is the great equalizer, technology appears to be a new engine of inequality.'¹⁴ The report's authors recommended that institutions make broad access a goal when implementing on-line courses. Their data show that the market alone will not bridge the digital divide. The focus on the organization of the school as an institution, its management, its performance and that of its students, in social and cultural isolation, may very well repeat the mistakes of underdevelopment. Interventions designed to reduce inequality and increase access to learning may actually increase inequities if surrounding infrastructure and training needs are not taken into account.

Since the advent of technical assistance and technical co-operation decades ago, this implantation from outside or superimposition of policies has frequently resulted in perverse effects—in underdevelopment. If policies for schools are implemented as such, based on assumptions of a strong national private sector, a regulatory State, discretionary income and market-oriented consumers, they may be unsustainable, resulting in even greater inequalities than before. For education to be sustainable and to contribute to sustainable development, it must respond to the needs and overcome the difficulties in its own environment—both social and natural.

Notes

1. Oswaldo Sunkel, Development styles and the environment, *in*: Heraldo Muñoz, ed., *From dependency to development*, Boulder, CO, Westview Press, 1981, p. 93–114.

2. Juan Luis Lodoño and Miguel Székely, Office of the Chief Economist, *Persistent poverty and excess inequality: Latin America, 1970–1995*, Washington, DC, Inter-American Development Bank. (Working paper 357, October 1997.)
3. Daniel Press, *Democratic dilemmas in the age of ecology: trees and toxics in the American West*, Durham, NC, Duke University Press, 1994, p. 28–60.
4. United States, Department of Education, *A nation at risk: the imperative for educational reform*, Washington, DC, Department of Education, 1983.
5. Jeffrey Puryear and José Joaquín Brunner, *An agenda for educational reform in Latin America and the Caribbean*, Washington, DC, Inter-American Dialogue, 1994.
6. Michael W. Apple, Rhetorical reforms: markets, standards and inequality, *Current issues in comparative education* (New York), vol. 1, no. 2, 30 April 1999.
7. Ibid., p. 288.
8. Ibid., p. 284.
9. David W. Grissmer et al., *Student achievement and the changing American family*, Santa Monica, CA, Rand, 1994.
10. Second Summit of the Americas, *Plan of action*, Santiago de Chile, April 1998.
11. Marco Encalada, *La educación ambiental se enraiza en el continente* [Environmental education is taking root in the continent], Washington, DC, Organization of American States, 1993.
12. Universidad y Medio Ambiente en América Latina y el Caribe, *Bogotá seminar*, UNESCO/UNEP/ICFES, 1998, p. 113–14.
13. Ibid., p. 109–11.
14. A College Board report warns that distance education excludes some students, *Chronicles of higher education* (Washington, DC), 8 April 1999.

EDUCATION FOR SUSTAINABLE DEVELOPMENT

EDUCATING FOR

A SUSTAINABLE FUTURE:

AFRICA IN ACTION

Nathalie Barboza

Introduction

Education plays an essential role in empowering people to address problems related to development in an effective manner. People must skilfully address these problems every day if they are to achieve a higher quality of life without compromising the welfare of future generations.

Original language: French

Nathalie Barboza (Benin)

Specialist, population and family life education, UNESCO Dakar Office, Senegal. Post-graduate degree in home economics. Former secondary school headmistress, Secretary-General of the UNESCO National Commission for Benin and, as a member of parliament, chair of the Education Commission. She has also been a deputy member of UNESCO's Executive Board. She has contributed to numerous publications, including *Éducation préventive VIH/SIDA : guide pratique à l'intention des animateurs d'organisations féminines de base* [Preventive HIV/AIDS education: a practical guide for grass-roots women organization leaders] (1999), *Femmes africaines face au SIDA : ampleur, impact et réponses* [African women confronted with AIDS: extent, impact and reactions] (1999) and *Éducation par les pairs pour un avenir viable : manuel pour les jeunes* [Peer education for a sustainable future: a manual for young people] (1999). E-mail: n.barboza@unesco.org

With appropriate reforms, education can contribute significantly to the struggle to meet the multiple challenges stemming from environmental problems, and population and development issues. These issues are especially relevant in sub-Saharan Africa. Thus, African education systems are increasingly focusing on such concerns as rapid population growth, rural exodus, illiteracy, high levels of dependence on outside assistance, abnormal mortality rates, the degradation of the environment, family hygiene, and decaying social and moral values. They are also focusing on topics such as the collective and national conscience, development, respect for laws and for the public good, children's rights, gender equality and problems surrounding the precarious conditions of life and health: the spread of sexually transmitted diseases, including AIDS, poverty, malnutrition, and conflicts and wars. All of these are current priority issues considered by African governments to be of the utmost importance.

The purpose of this article is to highlight the efforts being made in sub-Saharan Africa to heighten awareness of sustainable development issues and to form new behavioural patterns. It begins by offering a general account of the nature of education for sustainable development and some related information regarding environment and population issues. It then provides examples of national efforts designed to shape educational programmes that will help bring about a sustainable future.

Education for sustainability: an overview

WHAT DO WE UNDERSTAND BY SUSTAINABLE DEVELOPMENT?

After independence, sub-Saharan African nations tended simply to adopt and follow Western development models. This meant transferring Northern values, institutions and technologies to Southern countries. In fact, for a long time, African countries were generally satisfied to import manufactured products, leaving industrial investment as the exclusive domain of developed countries. This strategy failed because it did not reflect local realities. Its central focus was modernization rather than the development of national productive capacities. People were largely deprived of the benefits of consumer goods. And African countries were limited in their ability to implement programmes targeting such important local problems as the eradication of poverty, the preservation of ecological equilibrium, the improvement of the position of women, increased access to education and community involvement in decision-making and demographic management. Thus, the initial post-independence approach has evolved considerably over the past years, and various alternatives have been proposed.

The idea of sustainable development can be understood in different ways. In general, sustainable development means the will to follow a rational approach to economic administration and the creation of economic policies; to manage public matters efficiently and predictably; to show respect for future generations by integrating a concern for environmental protection into decision-making; and progressively to evolve towards democracy—the full participation of all concerned actors, while taking into account specific local circumstances.

Agenda 21, approved in June 1992 by the United Nations Conference on Environment and Development (UNCED) in Rio de Janeiro, proposes a new understanding of development. It stresses natural resource conservation based on the promotion of awareness-raising, the ideal of inter-generational fairness and acceptance of universal responsibility for development and the environment. This approach also takes into account the issue of gender equality and expresses concern for justice. Throughout, its principal focus is humanity itself and the maintenance of a satisfactory quality of life. It also adopts a serious approach to the need for agricultural development, underlining grass-roots participation and the necessary attenuation of pressure from population growth. Finally, Agenda 21 highlights women's vital role in environmental development and management. Principle 3 of the Rio Declaration stipulates: 'The right to development must be fulfilled so as to equitably meet developmental and environmental needs of present and future generations.' Sustainable development can thus be understood as a global process integrating environmental and population strategies directed towards meeting basic needs and improving the quality of life for present generations, without compromising future generations. Sustainable development means development without destruction.

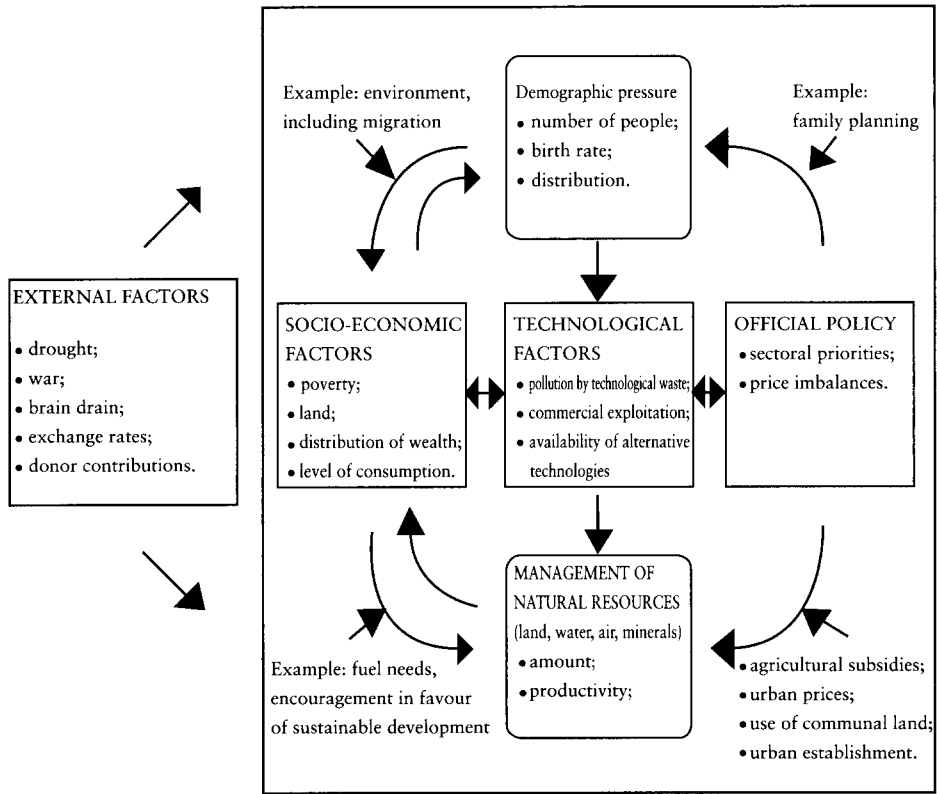
DEMOGRAPHIC GROWTH AND THE ENVIRONMENT

From the very beginning, we human beings have lived off natural resources by progressively inventing new technologies that have brought about an ever-increasing level of productivity in our natural milieus. For centuries, we have looked upon nature as a limitless source of possibilities. We believed we could continuously increase the pressures we exerted on it to enable an ever-growing population to satisfy their essential needs. Over the years, however, it became clear that population growth and per capita consumption led to an ever-increasing use of resources and ever more rapid production of solid, liquid and gas waste. Very quickly problems arose: air pollution, forest destruction, over-exploitation of the soil—with grave consequences for health, food production and overall productivity. After a certain point, our ecosystem could no longer withstand the exploitation of its resources without a change in its regenerative potential. Thus, one day we began to notice that the essential resources we had assumed were infinitely renewable—such as clean air, fertile soils and water—were being threatened by increases in our consumption of food, energy and other goods as a result of population growth. It has become necessary to find a balance between available resources and constantly growing human needs.

Figure 1 illustrates the interaction between population and environmental issues.

In sub-Saharan Africa, poverty, rapid demographic growth and migration intensify the pressures on available resources. This translates into practices with potentially devastating consequences—which communities are sometimes forced to adopt for the sake of survival—even with the awareness that these practices are harmful to the environment. Helplessly, we look on as deforestation outstrips the renewal of the continent's woodlands and soils are over-exploited.

FIGURE 1. Relations between population and natural resource issues



Source: United Nations Population Fund. *Population and the environment: the challenges ahead*. New York, 1991, p. 13.

DEMOGRAPHIC CRISIS

The world's population, which increases by almost 90 million each year, has just reached 6 billion. By 2050 it may reach 9 billion. However, since the Second World War, population growth has never exceeded 1% in Europe and 1.5% in North America. The rapid growth of the world's population is primarily the result of increases in the populations of developing countries, including those in sub-Saharan Africa, where the population currently grows by 3% per year. The mortality rate continues to drop while life expectancy grows, without being accompanied by a reduction in birth rates. The fertility index remains extremely high (six, sometimes even more than seven, children per woman). The extremely youthful African population—approximately 46% of the population is under 15 and approximately 20% is younger than 5—totalled 221 million in 1950, reached 749 million in 2000 and is expected to approximate 1.7 billion in 2050.¹ This demographic boom is accompanied by a dramatic expansion in the demand for goods and services. Attempts to satisfy this demand exert more and more pressure on available resources.

ENVIRONMENTAL CRISIS

While Northern countries are suffering from industrial waste and air and water pollution, Southern regions, such as Africa, are experiencing environmental degradation. The primary problems in Africa are desertification, the disappearance of tropical forests, the scarcity of drinking water, city congestion caused by rural exodus, atmospheric pollution and the accumulation of household rubbish. Survey results from the United Nations Food and Agriculture Organization (FAO) suggest that, during the 1980s, sub-Saharan Africa experienced an annual loss of 3.3 million of its 660 million hectares of forests and tree-covered savannahs, while there has only been a 3% renewal of the area lost.

Côte d'Ivoire's forests, for example, decreased from 12 million hectares in 1960 to 2.5 million in 1987. More and more tropical forests are being converted into cultivated land and housing. Numerous swamps are being transformed into fields, fishponds or housing. These changes profoundly affect water circulation and contribute to a decrease in rainfall. In most sub-Saharan African countries where wood is the main source of energy, the growing demand for wood further aggravates the destruction of forests, especially around urban areas. African forests are diminishing as deserts are advancing. According to the United Nations Bureau for the Sahel-Sudan Region, in 1989 the desert moved at least 150 kilometres to the south. African ecosystems are rapidly drying up.

Water shortages were once temporary phenomena in isolated locations. Today, however, limited access to drinking water is more widespread; it is now a fact of life in many African countries. Women are often forced to walk long distances in search of safe drinking water for their households because the rivers and other water sources near their homes are polluted. Unhealthy water and poor hygiene are some of the most serious environmental problems African countries face today.

Soil erosion is another growing problem faced by sub-Saharan African countries. In Ethiopia, in particular, it represents one of the principal causes of soil degradation. Other significant causes of soil erosion throughout the region include exaggerated use of fertilizers and pesticides and the shortening of the fallow period.

Finally, rural exodus leads to the overpopulation of cities where disillusioned migrants are often forced to live in cramped conditions, where they may also face unemployment and numerous health problems. With the growth of urbanization in sub-Saharan Africa, extremely dense concentrations of people in urban areas are evident. These concentrations lead to the production of more and more dangerous solid wastes that are not regularly collected because of poor urban sanitary services. Household rubbish is often deposited in public areas or directly in water supplies. Some neighbourhoods may be totally without refuse services. As a result, the risks associated with pollution grow even worse.

AFRICAN EFFORTS

The profound population changes and the economic and social development that Africa underwent in the 1970s led to a modified approach to population growth.

The 1984 Arusha Conference, held in the United Republic of Tanzania, focused on population issues. At the conference, participating African nations adopted the Kilimanjaro Programme. The programme outlines approaches to issues of population and autonomous development in Africa and suggests appropriate population management policies that are sensitive to economic and social development issues. In 1990, participating African countries signed the Dakar Declaration on Population and Development Education in Africa. This declaration laid out the African position at the International Congress on Population and Development Education, held in Istanbul in 1993. The Lagos Environmental Action Plan recommended that African States create national environmental education programmes, particularly to raise public awareness, improve legislation and collect as well as disseminate information with the goal of continuously monitoring the state of the environment on the continent. The 1991 Treaty of Abuja (Nigeria) led to an agreement by African nations to ban the import of toxic wastes and affirmed their co-operation regarding cross-border transport, administering and treatment of toxins produced in Africa.

At the International Conference on Population and Development (ICPD) held in Cairo in September 1994, Africa reaffirmed its resolution to translate its heightened awareness of major environmental and population challenges into decisive action within each country. Numerous environmental and population education programmes have been launched in sub-Saharan Africa countries, including Angola, Benin, Burkina Faso, Burundi, the Central African Republic, Congo, Côte d'Ivoire, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau, Kenya, Mali, Mozambique, Nigeria, Sao Tome and Principe, Senegal, Sierra Leone and Togo. The goal of these programmes is to take control of population and environmental variables.

Despite concerted efforts and the undeniable advances resulting from these programmes, urgent problems persist. For example, a review of information dissemination, education and communication reveals that national activities designed to address environmental and population problems lack cohesion. The activities of the diverse organizations involved in the implementation of the continent's various environmental and population programmes are simply not co-ordinated. In most countries, education ministries are responsible for population education programmes, while environmental education programmes fall under the umbrella of environment ministries or environmental protection agencies.

National efforts towards education for a sustainable future

GENERAL TENDENCIES

All sub-Saharan African countries have demonstrated their determination to translate their heightened awareness of and interest in environmental, population and developmental issues into concrete initiatives and actions.

We are happy to note that most African countries have formulated their own strategies for dealing with environmental issues. Their plans constitute general frameworks for State responses to environmental, population and development challenges. They highlight central environmental problems and define policies and institutional approaches for dealing with them. They also delineate the necessary budgets.

The Benin national plan for Agenda 21 provides a good example. It is divided into four sections: (a) social, economic and cultural dimensions of sustainable development; (b) conservation and management of resources for sustainable development; (c) the important roles of major groups; and (d) ways of accomplishing the goals and the means for doing so. This agenda envisions the involvement of women, children, youth, non-governmental organizations, communities, workers, unions, businesses and industries, as well as agricultural, scientific and technical communities, in the fulfilment of plans for sustainable development.

The Senegal national action plan comprises three broad sections:

1. Context and issues at stake;
2. Strategic goals designed to help the nation move beyond past problems;
3. Measures supportive of sustainable development strategies.

Among other things, the Senegal plan emphasizes the reasons for the general programme of environmental management matters and explains the necessity of mobilizing all sectors of society, especially youth and women. Due to their numbers, their position and the roles they play in the economic life of a country, women and youth should be privileged participants in all environmental management projects and programmes. The plan also accentuates the need to increase social communication to educate the various actors involved in environmental management.

The heightened awareness in African countries of issues of population growth is being translated into public declarations regarding population issues. This is true for almost all the countries of the region, including Benin, Burkina Faso, Côte d'Ivoire, Gambia, Ghana, Guinea, Kenya, Liberia, Mali, Niger, Nigeria, Rwanda, Senegal, Togo and Zambia. While taking into account specific national circumstances, all of the population declarations recommend global approaches to improving human living conditions through pertinent education, literacy, health, employment, food, nutrition and environmental action plans. Like the national environmental programmes, the population declarations devote particular attention to vulnerable groups and, in general, seek to heighten public awareness and aim at voluntary support for the objectives they articulate.

In connection with the implementation of national environmental plans and population policies, a number of projects and programmes have been launched in these countries in collaboration with international, regional, national and non-governmental organizations, including the World Bank, UNDP, UNFPA, UNICEF and UNESCO. Naturally, human resource training is a central element of each of these projects and programmes. Schools, associations, village organizations and non-governmental organizations everywhere are gathering forces and becoming involved in

efforts for forest renewal, combating bush fires, regenerating degraded soil and campaigns to disseminate information and heighten public awareness regarding reproductive and sexual health issues and related matters.

The international non-governmental organization Environmental Development Action in the Third World (ENDA Third World) has launched an educational project called 'A Hope in the Desert', focused on Burkina Faso, Mali, Senegal and Sudan. It involves schoolchildren and young people in experiments and mini-projects complemented by environmental education programmes taking place in the village, based on local socio-cultural characteristics and targeting the family.

Family planning and fertility control are becoming less and less taboo subjects. Women are fighting for economic power and direct involvement in natural resource and environment management programmes, as well as in the formulation of decisions regarding environmental and population issues.

As well as observing the internationally celebrated World Population Day and World Environment Day, many African countries focus on population, environment and development issues during officially designated day-, week- or fortnight-long periods. And most African countries are actively collaborating with UNESCO's Man and the Biosphere (MAB) Programme, especially through research, observation and demonstration activities designed to develop people's scientific and technical capacities to address environment and development issues.

While many countries have ministries of mining and agriculture, some—Sierra Leone, for instance—have special departments focused on the soil, habitat and the environment with their own specific functions. In general, these departments ensure cross-ministerial and cross-sector co-ordination of activities related to natural resources and the environment.

EDUCATIONAL EXPERIMENTS IN EDUCATION FOR A SUSTAINABLE FUTURE²

Kenya

In Kenya, the main objective of education for sustainability is to incorporate into both formal and informal education activities connected with environmental issues and with the technological needs of economically active women in rural areas. Environmental initiatives undertaken in schools and colleges are enhanced through information exchanges, which makes the educational programmes particularly effective, especially in Nairobi. Kenya's programme, which began in the 1998/99 school year, is continuing and gaining strength

Senegal

As in other countries, population and family-life education programmes take into account environmental concerns. Teaching materials dealing with population and

family-life education for elementary teaching (charts, posters, etc.) deal with both population and environmental issues.

A group for the study and teaching of population issues (GEEP) directs a two-part environmental and population education and information plan aimed at secondary schools: (a) the 'population pedagogy' plan seeks to develop a synergy of programmes and methods from a variety of disciplines (history, geography, natural sciences, economics, home economics and social economy, etc.) using a modular approach—an interdisciplinary didactic model; and (b) the 'information-education-communication' (IEC) plan, which is being carried out through an innovative structure. A family-life education club handles the extra-curricular teaching agenda. GEEP has successfully directed several activities, including a holiday camp, 'EPD³/Youth-solidarity', organized in co-operation with UNESCO in August 1998.

Nigeria

In Nigeria, the approach to education for sustainability is marked by: (a) its pertinence, the necessity of teaching more socially apt competencies that directly and immediately yield practical applications; (b) an awareness that education is the means *par excellence* for instilling the values necessary for the survival of a country; (c) an understanding of the cross-sector nature of different life problems and the internal links between them, and a consequent sensitivity to the need for an integrated approach to solving these problems; and (d) an understanding of the significance and urgency of a thematic and practical educational approach that places the pupil and experimental methods at the centre of the interaction between teaching and learning.

Education for sustainability occurs in primary education as a part of social science, health science, household science and agricultural curricula. In secondary school, it takes place in the context of courses in the social sciences, home economics, sanitary education and agriculture. It is also introduced into traditional practical training programmes outside the regular secondary curricula.

A review of Nigeria's population and family-life education programme has made it possible to enlarge its limited scope to include issues such as the social consequences of uncontrolled sexuality, the links among population and resources, demographic burdens and urbanization, gender equality, the right to education and, finally, reproduction. This broader scope has progressively reduced the vulnerability of the population and family-life education programme to accusations that it entails an excessive focus on human sexuality.

With the assistance of UNDP and UNESCO, environmental education (EE) programmes have been implemented at all educational levels. These programmes overlap with ones focused on population and family-life education. Those responsible for each programme assert the centrality of their agenda. The partisans of population and family-life education claim that 'population is everything', while the defenders of environmental education maintain that 'the environment is everything, since population issues represent only one aspect of a larger environmental problem'.

Some secondary school curricular materials address themes related to education for sustainability: urbanization, pollution, agriculture and other relevant topics. At the same time, general programmes in higher education provide fertile ground for the introduction of sustainability issues using an interdisciplinary approach.

The Nigerian Educational Research and Development Council (NERDC) has prepared an urbanization module. With the assistance of the Worldwide Fund for Nature (WWF), the Foundation for National Protection has published booklets and manuals spreading the principal messages of education for sustainability. These documents are primarily used in urban schools, particularly in the Southeast. Chevron Nigeria Limited is also working on the production of a teaching manual designed to foster knowledge, attitudes and competencies related to environmental issues in the context of the energy and lubricant industry.

A post-graduate degree in environmental education is being offered at Calabar University, and undergraduate and post-graduate classes are offered at the Nigerian University in Nsukka. Environmental education is also part of the curricula at universities in Ekiadolor and Ijanikin. At the secondary level, environmental protection clubs are being created and an environmental documentation centre has been established in Lekki.

Benin

Convinced that an integrated and interdisciplinary approach to environmental and population issues is a crucial means of moving towards sustainable development, Benin has reoriented its population and family-life education programmes. It has altered both content and implementation strategies. In 1996, population and family-life education were replaced by education for sustainable development.

In the formal education system, education for sustainable development aims primarily at enabling students and teachers to acquire the necessary knowledge, as well as to adopt responsible attitudes and behaviour patterns regarding population, the environment and conscientious parenting. This programme is in the process of being institutionalized and disseminated throughout Benin's education system. From 1996 to 1999, UNFPA financed a special project during which population and family-life education programmes were reviewed from an integrated and interdisciplinary perspective. Distance learning modules addressing the education of girls and the fight against poverty were outlined and reproduced. Comic strips and posters treating environmental, population and developmental issues were produced, as were addenda to biology and home-economics texts. These materials and teaching aids are used in public and private schools engaged in education for a sustainable future. In conformity with a strategy to which the general dissemination of information regarding sustainable development is central, primary and secondary school-teachers, as well as all members of departmental committees and sub-committees of the sub-prefectures charged with supervising the field action, were trained from 1996 through 1998 in an approach to education that aims at sustainability.

All teaching materials produced for the formal education system can be adapted to the informal sector. Sketches written expressly to increase public awareness have been presented on radio and television. Using weekly radio time at its disposal, the Institut national pour la formation et la recherche en éducation (INFRE—National Institute for Educational Training and Research) has helped increase the awareness of students, teachers and the general public about issues related to education for sustainability.

An evaluation of the impact of this education programme has been undertaken, though results are not yet available. It is nonetheless clear that teachers trained in education for sustainability feel more at ease with their instructional activities. And there are signs of changing behaviour on the part of students—and even some parents.

A commitment to education for sustainability has also influenced the design of the examination required to earn the primary education certificate. It has been integrated into the training programmes for secondary education inspectors and of candidates for the primary schooling inspectorate competence certificate (BAIP); several subjects within these programmes deal with sustainable development.

In co-operation with UNICEF, the Office national du bois (National Office of Wood) and the forestry section of German Technical Co-operation (GTZ), the Benin Nature Association also carries out effective sustainable development activities. Notably, it publishes an environmental education magazine, sponsors a video club specializing in issues related to the environment and human rights and organizes ecological excursions and camps.

Burkina Faso

The introduction of education for sustainability into Burkina Faso's curricula entailed improving the objectives and conceptual underpinnings of population and family-life education. It also required the transformation of approaches to family-life education in ways calculated effectively to take into account the connections between environment, population and development.

Activities focusing on information dissemination and increasing awareness of issues related to education for sustainability were directed towards decision-makers and heads of establishments. Teacher trainers, educational inspectors, educational counsellors, professors and teachers were trained in education for sustainable development to assist them in revising existing curricula.

Activities undertaken since 1996 with the financial assistance of UNFPA have enabled Burkina Faso to increase awareness of sustainability issues among 371 secondary school staff and to prepare 116 trainers and 1,000 secondary school-teachers to engage in education for sustainability. Some 230 secondary schools have incorporated teaching and learning for sustainable development in their curricula. Because of a delay in the process of making population education programmes generally available, education for sustainability has not yet been introduced into basic school. Nonetheless, twenty elementary teacher trainers, as well as thirty-five instructors from the Bourkinabé

Ministry of Agriculture, have already benefited from training programmes focused on education for sustainability. In order to provide support to teaching/learning activities, ten training modules and lesson-plan samples have been created.

Since the beginning of the 1998/99 school year, education for sustainability has been a reality in Burkina Faso. Those responsible for the projects indicate that it will become a feature of elementary education as soon as teachers are adequately trained. They have also pointed out that the programme needs reinforcement.

Applied know-how occupies an increasingly prominent place in the curricula of a number of the country's secondary schools. One indication of this development is the creation of areas devoted to science. The scientific unit of the Guezzin Coulibaly secondary school in Bobo Dioulasso is a good example. It has created a fish-breeding pond, a grove, a market garden, and more—including a pollution-measuring project focused on regional waters intended to keep the authorities and the public informed regarding pollution levels. The project has been accepted into the international Canada-based network designed to foster the control of pollution of our planet's waters.

Conclusion

Education is one of the most dependable ways of ensuring genuine public awareness regarding environmental, population and developmental issues. It is among the most reliable means of gaining real-life knowledge—knowledge that can be used effectively to bring about positive and permanent change in behavioural patterns vis-à-vis these problems. It can enable people to acquire the skills they need to manage their environment more adequately.

Education is also the most efficient means of reducing, perhaps even of eliminating, the negative consequences for future generations of technologies that improve the quality of life today. Education for a sustainable future will allow rural populations to unify in the fight against desertification and poverty and in the effort to preserve bio-diversity and achieve sustainable development. This option for solidarity should connect not only present and future generations, but also poor and rich continents. Education for a sustainable future means working at the dawn of the twenty-first century towards cross-generational solidarity that aims at a higher quality of life for everyone. In conclusion, we offer you an invitation to 'act for life' expressed in the following poem by Seynabou Top, a student of Gaston Berger University in Saint Louis, Senegal:

ACT FOR LIFE

Oh youth! Don't you ever dream of a world better than the one you live in?
 A world of happiness, where humans control their demographic burden,
 A world with a healthy environment,
 A world, where all the qualities of life are unified?
 Yes, of course.

To transform your dream into reality,
 Wake up,
 Open your eyes,
 Fight with your youthful effort and desire against rapid population growth,
 Say NO to the degradation of your environment,
 Behave in a way that increases your well-being while preserving life for future generations; to make your dream a reality.

(A poem taken from *Manuel d'éducation des jeunes par leurs pairs en EPD* [Peer education of young people for a sustainable future], UNESCO, GEEP, 1999.)

Notes

1. Source: Population Division, United Nations.
2. The examples from Kenya and Nigeria are presented in this article thanks to Mr Trevor Sankey of UNESCO, Nairobi, Kenya and Mr Noël Ihebuzor of the Community Development Department, Lagos, Nigeria, both of whom willingly replied to my queries for information.
3. The interdisciplinary project 'Education for Sustainable Future (environment, population, development)', UNESCO, Paris.

Bibliography

- Aguilar P. ; Retamal G. 1998. *Rapid educational response in emergency situations: discussion document*. Geneva, UNESCO:International Bureau of Education.
- Bagayoko, W. 1999. *Approche globale et intégrée des questions d'environnement, de population et de développement au Mali : étude de cas* [A global, integrated approach to environmental, population and development issues in Mali: a case study]. Bamako, UNESCO. (Project Mali/92/P01.)
- Barboza, N. 1994. *L'éducation en matière de population : une contribution à l'enrichissement des systèmes éducatifs* [Population education: a contribution to the enrichment of education systems]. Dakar, UNESCO: Regional Office for Education in Africa.
- Benin. 1997. *Agenda 21 national* [National Agenda 21]. Cotonou.
- Benin. Educational programme Benin-Nature. 1997. *Woutoutou : magazine pour la conservation de la nature au Bénin : eau-assainissement-environnement* [Woutoutou: a magazine for the preservation of nature in Benin: water-purification-environment]. Cotonou.
- . 1997. *Woutoutou : magazine pour la conservation de la nature au Bénin : la pollution* [Woutoutou: a magazine for the preservation of nature in Benin: pollution]. Cotonou.
- . 1997. *Woutoutou : magazine pour la conservation de la nature au Bénin : la forêt de Lama, une merveille du monde* [Woutoutou: a magazine for the preservation of nature in Benin: the Lama forest, a world wonder]. Cotonou.
- . 1997. *Woutoutou : magazine pour la conservation de la nature au Bénin : le Sahara, voyage au cœur du désert* [Woutoutou: a magazine for the preservation of nature in Benin: the Sahara, a voyage into the heart of the desert]. Cotonou.
- D'Almeida, S. 1999. *Approche globale et intégrée des questions d'environnement, de population et de développement au Togo : étude de cas* [A global, integrated approach to

- environmental, population and development issues in Togo: a case study]. Lomé, UNESCO. (Project Togo/88/P.)
- Da Sansan, J. B. 1999. *Approche globale et intégrée des questions d'environnement, de population et de développement au Burkina Faso : étude de cas* [A global, integrated approach to environmental, population and development issues in Burkina Faso: a case study]. Ouagadougou, UNESCO. (Project BKF/93/PO3.)
- Debouvry, P. 1998. *Décider pour aménager* [Deciding for development]. Dakar, ENDA Third World.
- Environmental Development Action in the Third World, EDEV Team; Senegal Red Cross. 1997. *À l'école de l'environnement* [At the environment school]. Dakar, ENDA Third World.
- Guinea. Ministry of National Education and Scientific Research. National Institute for Research and Educational Action (INRAP). 1997. *Le mea culpa de Bakary* [The mea culpa of Bakary]. Conakry, INRAP.
- Kourouma, L. 1999. *Approche globale et intégrée des questions d'environnement, de population et de développement en Guinée : étude de cas* [A global, integrated approach to environmental, population and development issues in Guinea: a case study]. Conakry, UNESCO. (Project GUI/99/P01.)
- Osseni, N. 1999. *Approche globale et intégrée des questions d'environnement, de population et de développement au Bénin : étude de cas* [A global, integrated approach to environmental, population and development issues in Benin: a case study]. Cotonou, UNESCO. (Project BEN/92/P01.)
- Psacharopoulos, G.; Woodhall, M. 1988. *L'éducation pour le développement* [Education for development]. Washington, DC, Economica.
- Senegal. Ministry of Environmental Protection. 1997. *Plan national d'action pour l'environnement* [National environmental action plan]. Dakar.
- Sy Savne, K. 1999. *Approche globale et intégrée des questions d'environnement, de population et de développement en Côte d'Ivoire : étude de cas* [A global, integrated approach to environmental, population and development issues in Côte d'Ivoire: a case study]. Abidjan, UNESCO. (Project IVC/98/P03.)
- UNESCO. 1994. *Education et information en matière d'environnement et de population pour le développement humain (EPD)* [Population and environmental education and information for human development]. Paris, UNESCO.
- . 1997. *Éduquer pour un avenir viable : une vision pluridisciplinaire pour l'action concertée* [Educating for a sustainable future: a multidisciplinary vision for concerted action]. Thessaloniki, Dakar, UNESCO: Regional Office for Education in Africa.
- UNESCO. Regional Office for Education in Africa. 1995. *Cadre général d'action pour l'Afrique au sud du Sahara* [General framework for action in sub-Saharan Africa]. Dakar, UNESCO: Regional Office for Education in Africa.
- . 1995. *Rapport sur l'état de l'éducation en Afrique : stratégies éducatives pour les années 90 : orientations et réalisations* [Report on the state of education in Africa: educational strategies for the 1990s: directions and achievements]. Dakar, UNESCO: Regional Office for Education in Africa.
- . 1996. *Guide pratique d'élaboration de matériels didactiques pour l'EPD en Afrique au sud du Sahara* [A practical guide for creating EPD educational materials in sub-Saharan Africa]. Dakar, UNESCO: Regional Office for Education in Africa.
- . 1997. *Environnement, population, développement: éduquer pour un avenir viable: UNESCO-Dakar en action* [Environment, population, development: educating for a

- sustainable future: UNESCO-Dakar in action]. Dakar, UNESCO: Regional Office for Education in Africa.
- . 1997. *Lignes directrices pour l'élaboration d'un curriculum EPD en Afrique au sud du Sahara* [Guiding principles for the formulation of an EPD curriculum in sub-Saharan Africa]. Dakar, UNESCO: Regional Office for Education in Africa.
- . 1997. *Prévenir le VIH/SIDA en milieu scolaire: un défi pour l'Afrique francophone* [Preventing HIV/AIDS in schools: a challenge for French-speaking Africa]. Dakar, UNESCO: Regional Office for Education in Africa.
- . 1997. *Séminaire/atelier sous-régional d'information, de sensibilisation et de production pour promouvoir la participation des femmes à l'EPD 1997. Rapport général* [Sub-regional seminar/workshop focused on information, public awareness raising and production for promoting the participation of women in EPD 1997. General report]. Dakar, UNESCO: Regional Office for Education in Africa.
- United Nations Population Fund. 1991. *Population and the environment: the challenges ahead*. New York, UNFPA.
- . 1992. *L'environnement et la croissance démographique : dix ans pour agir* [Population growth and the environment: ten years to act]. New York, UNFPA. (Population reports review series M, No. 10.)
- United Nations Conference on Environment and Development. 1992. *Agenda 21, Rio declaration on environment and development, Declaration of forest principles: main texts of the United Nations Conference on Environment and Development*. New York, United Nations.
- World Bank. 1984. *World development report*. New York, Oxford University Press.
- . 1984. *Toward sustained development in sub-Saharan Africa: a joint program of action*. Washington, DC, World Bank.
- . 1986. *Population growth and policies in sub-Saharan Africa*. Washington, DC, World Bank.

EDUCATION FOR SUSTAINABLE DEVELOPMENT

MANAGING EUROPEAN LEARNING PROCESSES TOWARDS SUSTAINABLE DEVELOPMENT

*Frits Hesselink*¹

Introduction

Mechanisms other than legislation and financial instruments are increasingly integrated into the framework of national sustainable development policies. Education for sustainable development (ESD) is one of those mechanisms.² ESD is considered as a tool for governments to bring about progress towards sustainability.

Since the Rio Declaration, environmental education, in both the formal and informal sectors, has been moving towards ESD.³ In some European countries, such as the United Kingdom, it seems that ESD itself is the starting point, while in other countries, such as the Netherlands and Hungary, environmental education is now being reoriented towards ESD. Although there are many different views and approaches, the emerging trend in Europe is to see ESD as a broad process of societal learning.

Original language: English

Frits Hesselink (Netherlands)

Started his career as a Fellow at the Institute for International Law of the University of Utrecht. He became involved in curriculum development for law and social studies. Co-founder in 1976 and Managing Director since 1983 of the Institute for Environmental Communication in Utrecht. Involved in formulation and implementation of the various Dutch national programmes for environmental education. Became Chair of the IUCN Commission on Education and Communication in 1994. Since 1998 he has worked for his own consultancy in the field of education, communication and training. Clients are governments and (international) organizations in Europe and other parts of the world. E-mail: Hesselink@knoware.nl

Learning towards sustainability

It is useful to see ESD as *learning towards sustainability*. This type of learning is provided not only by the regular education sector, but also by other parts of society. Governments and international organizations are now focusing on knowledge management, supporting and stimulating bottom-up activities towards learning for sustainability. Non-traditional ways of looking at education are being promoted. For example, one could consider learning from a management perspective. How do we manage the various learning processes in society towards sustainability? Here are some various dimensions of management and how they could be applied to learning for sustainability:

- *Marketing*: managing the perceptions of target groups in order to induce behavioural change compatible with sustainable development based on individual calculation of costs and benefits;
- *Dialogue*: exploring common understanding between stakeholders, which can lead to bottom-up policies for sustainable development and the co-management of their implementation;
- *Education*: acquiring knowledge, skills, attitudes and values to enable and empower students for sustainable practices, initiatives and participation as citizens;
- *Higher education and vocational training*: acquiring knowledge, skills, attitudes and values to enable and empower (future) professionals for sustainable practices, initiatives and participation in their workplace;
- *Learning organizations*: managing change in companies, institutions and communities towards sustainability by formulating objectives, setting indicators, planning actions, monitoring and evaluating; and
- *Knowledge management*: managing data, information and knowledge systems that support and stimulate learning and sustainability.

These areas will be further explored in the following sections, with supporting examples of innovative European programmes and initiatives.

MARKETING: INFORMAL LEARNING THROUGH COMMUNICATION PERMANENTE

The classical marketing mantra of ‘product, price, place, personnel and promotion’ (the ‘five P’s’) is a well-known strategy in business thinking. To use marketing techniques to further perceptions of sustainability is rather new. However, it is through the *communication permanente* of messages that influence the perception of consumers and the public at large that much informal learning takes place. For instance, the Body Shop, the British cosmetics and skin-care company, is a successful example of managing consumer perception towards a more sustainable consumption pattern.⁴

A second example is a Dutch company, Odin, which has earned a large share of the market for organic products. Through the ingenious introduction of a subscription to a weekly delivery of organic fruit and vegetables a large number of consumers became customers.⁵

Sustainable tourism (or eco-tourism) is slowly achieving a share in the holiday/leisure market. Large European agencies have already made changes in their range of tourist destinations and modes of transport. The industry carefully watches market developments and is in constant communication with suppliers, NGOs and local authorities at 'green' destinations.⁶

Other innovative marketing strategies include the Dutch Ministry of Environment publicizing the romantic scenery of national parks as a suitable background for wedding photographs, as well as its project to have art and graphic design students make television advertisements for their peers.⁷ In Oporto, Portugal, the Serralves Foundation takes advantage of a magnificent urban park that is home to a contemporary art museum to promote art and the appreciation of nature at the same time.

DIALOGUE: LEARNING THROUGH SOCIAL INTERACTION

For successful sustainable development, civil society must play a role in policy-making and implementation.⁸ For instance, protected-area management plans should be developed in dialogue with stakeholders: the people who are directly affected by or influential for the success or failure of the management plan. This implies moving away from traditional planning carried out behind desks by experts and bureaucrats. Civil servants have to communicate more effectively with their colleagues from other departments, as well as with experts, citizens, representatives of local businesses, etc. Effective communication with various target groups requires different skills and tactics from those traditionally used.⁹ The following examples illustrate how dialogue can be integrated into learning for sustainability.

The IUCN's Commission on Education and Communication runs a training programme in five Central European countries for governmental and other conservation experts. This programme aims to manage communication in order to reach objectives through dialogue rather than through top-down approaches. Initially, around twenty people followed an intensive training course, and now training materials have been developed and used in all five countries.

As in many other parts in the world, Local Agenda 21 is the engine for change in policy-making and implementation at the local level in Europe. Dialogue between stakeholders, including citizens and local authorities, takes place in the form of round-tables, joint fact-finding missions, and a variety of other projects and activities.¹⁰

EDUCATION: FROM ISOLATION TO INTEGRATION OF LEARNING

The educational community is increasingly opening up to 'the world outside' the school, and in this way incorporating new teaching methods. At the same time, actors in 'the world outside' (businesses, authorities, consumers) are beginning new learning processes linked to sustainable development. It seems that the walls sur-

rounding environmental education are broken down when the focus of education is on sustainability.

Learning in the classical sense, the transfer of knowledge, is no longer sufficient. It concerns social orientation, learning in social contexts, development of opinions, exploration of possibilities and working with uncertainties. Thus environmental education becomes strongly aimed at change. Learning becomes to a large extent identifying chances and limitations together. This is achieved by reflection on new possibilities and reflection on the profoundness of the available knowledge.¹¹

With ESD, not only are the target groups of environmental education more diverse, but also the community of educators is widened. As noted by the programme statement of the United Kingdom's 'Education 21' programme, the community of educators includes:

Teachers, lecturers, curriculum developers, administrators, support staff, industrial trainers, countryside rangers and staff, environmental health and planning officers, education officers within NGOs, community educators, youth leaders, parent association members, media people, representatives of learners in all contexts—and yet more.¹²

A few examples of the breaking down of barriers from various parts of Europe will describe this educational trend.

The Austrian FORUM project is oriented towards new partnerships and 'missing links', such as co-operation between schools and farms in order to learn about the realities of modern agriculture. All of the relevant partners have participated in the development of the programme. Training courses for teachers, farmers and NGOs have also been developed.

At the European Environmental Education Foundation, the project Young Reporters for the Environment encourages young journalists to investigate current issues in teams made up from various collaborating European schools. Participating schools communicate through the Internet, where the projects are also posted upon completion. The campaign offers professional training for environmental journalism and an introduction to information technology, as well as promoting European co-operation.

Rozino is a small Bulgarian village close to the Central Balkan National Park. The school in Rozino has started to grow herbs that are earmarked for conservation within the territory of the park and are of economic interest for the local people. The municipality provided public land for this project and the park's agronomist serves as a consultant to the project.

Project MOMO (Mobilität Morgen) in Austria is a mobility training course combining the themes of ecology (less wasted energy, pollution and noise), economy and security. The project targets students at the age when they are learning how to drive (16/17-years old) and creates an alliance of key agents (students, teachers, parents and driving schools) for the socialization of individual mobility.

HIGHER EDUCATION/VOCATIONAL TRAINING: PROFESSIONAL EXPERTISE FOR SUSTAINABILITY

Bringing about sustainability demands different professional skills and knowledge from those previously promoted. It therefore implies a change in higher education and vocational training curricula. For instance, sustainable design is an important trend in university-level architecture and engineering courses. In faculties of economics, sustainability has become a new focal point for research and learning.

The European Union supports a network of universities that run post-graduate management training courses focused on corporate practice and sustainability. A recent European conference in Brussels highlighted a broad range of well-documented and successful activities in the field of higher education and vocational training.¹³

Joint initiatives have been undertaken by universities from different countries to introduce the concept of sustainability into higher agricultural education. A contact group has been set up with a view to organizing an inter-university conference for agricultural and related sciences in Europe.¹⁴ Its main goals are to make an inventory of our present understanding of sustainability and to provide guidelines for embedding the concept of sustainability in agriculture, forestry, aquaculture and related science curricula.

LEARNING ORGANIZATIONS: LEARNING THROUGH MANAGING CHANGE

Learning towards sustainability requires organizational change. This implies that changes to the curricula and to teaching methods are not sufficient. Just as companies aiming to integrate sustainability into their corporate ambitions can succeed only if corporate culture, practices and organization are changed, schools must also change their culture and organization. The same is true for local communities working towards learning for sustainability through Local Agenda 21 initiatives. Developing sustainable development indicators in Local Agenda 21 projects can be seen as milestones, comparable with planning organizational change in companies and institutions. The following examples illustrate different forms of learning organizations.

Sweden is currently engaged in a process of adjustment to achieve ecological sustainability. To encourage schools to become involved in this process, the Swedish Government has issued an ordinance under which schools that are pre-eminent in the environmental field will receive recognition in the form of a Green School Award. The National Agency for Education has therefore (in co-operation with the Swedish Environmental Protection Agency) set criteria to be met to qualify for this award covering all aspects of school life, teaching and the school as a workplace. The criteria also take account of ethical, aesthetic, cultural and health considerations. Schools are expected to review their activities and their impact on the environment, develop an action programme and present the environmental improvements they have achieved. A similar approach is applied in the Belgian Green School Project.

The World Business Council for Sustainable Development (Switzerland) operates a distance education programme on the Internet for managers and young professionals in the corporate sector. This virtual university offers a diploma and several networking opportunities for professional exchange. In co-operation with the Prince of Wales Foundation, workshops are organized for top managers.¹⁵

An initiative of the Dutch Council for Sustainable Development helps local communities to set targets and develop performance indicators, as well as giving feedback. All local communities involved in Local Agenda 21 initiatives can access a 'sustainability mirror' online. By filling in a questionnaire they can test their community's progress towards sustainable development. As an incentive, each year the names of the top 100 communities are communicated to the media.

KNOWLEDGE MANAGEMENT: WHAT QUESTIONS ARE ASKED IN AND ON LEARNING?

Learning towards sustainability depends on the generation of new knowledge, its co-ordination and codification, dissemination, integration into other disciplines, the technologies for knowledge transfer and the various roles and management of these processes.

Generation of new knowledge for learning towards sustainability can take place in creative and innovative ways. In The Hague, the local authorities organized a 'Learning for Sustainability' master class. In seven interactive meetings between social scientists and more pragmatic participants, fifteen practical cases shed light on how to deal with public space and learning for sustainability.

Codification of knowledge on learning for sustainability is also an important component of knowledge management. Professor Gerhard de Haan at the University of Berlin is collecting examples of good practice in European ESD. Additionally, books and conference reports are important ways of codifying knowledge and making it available to a wider audience.

Knowledge can vary from tacit and complex knowledge to well-documented and articulated knowledge. In Austria, FORUM Umweltbildung is developing a handbook (complemented by new media, an Internet website and CD-ROMs) on ESD as part of a series of round-tables, training courses and conferences. This broad and interdisciplinary approach is being used to stimulate discussion and co-operation between different partners and stakeholders. Process and product thus become equally important in the programme's development.

Despite the huge number of organizations and professionals working in the field of environmental education in the Netherlands, until 1997 no national network existed for the exchange of knowledge and experiences of professional environmental education workers. Today, transfer of new knowledge about learning for sustainability is supported by a Dutch website called NME-Rotonde [Environmental Education Roundabout].¹⁶

Disseminating information and knowledge on learning for sustainable development is one of the core tasks of the *European environmental education newsletter* (EEEN). EEEN is now available via the Internet. The newsletter features:

- news items on policies, laws and regulations concerning the environment and environmental education;
- information on events, congresses, exhibitions and meetings; and
- information on publications.

An interesting feature of EEEN is that, to stimulate the exchange of knowledge and ideas, all relevant contact information of those behind news items is provided (address, telephone, fax, e-mail and, when available, a website).

The Internet can be used to disseminate and generate knowledge through dialogue between experts. A recent example is the Dutch initiative called 'ESDebate'. As a follow-up project of the Pan-European Expert Meeting on Sustainable Development and Environmental Education, an Internet discussion was held from September to December 1999. More than forty experts from countries all over the world participated. The results are available online.¹⁷

On 9 and 10 December 1999, EEEN hosted electronically the Millennium Conference on Environmental Education and Communication to discuss the shape of environmental education in the future. A book with the papers presented at the meeting will be available in early 2000.¹⁸

Integration of knowledge on learning towards sustainability into other disciplines and policies can be used to disseminate the lessons learned and extend opportunities for learning. International organizations can play an important role in promoting this integration. The Organisation for Economic Co-operation and Development is devoting increasing attention to the role of education in governmental policies. The Sustainable Consumption Programme considers initiatives that used education and communication to change consumption patterns.

The Council of Europe¹⁹ launched the project Education for Democratic Citizenship in 1997 with the aim of enhancing public understanding of democratic citizenship through:

- defining the knowledge, attitudes and skills that enable citizens to participate in a pluralist society;
- encouraging grass-roots experiences in various Member States, including environmental education, community development and young people's participation in decision-making processes; and
- training of professionals in the field of democratic citizenship.

Concluding recommendations

The last few years have seen an abundance of new initiatives in the field of learning for sustainability. In marketing terms, knowledge on learning for sustainability has focused mainly on the supply side. Little is known about the demand side: what kind of knowledge is needed? Which actors need what kind of information?

The time is right to approach knowledge management from a demand-oriented philosophy. A strategy focusing on the relevance of information instead of its completeness is most likely to be successful. Good results can be achieved using bot-

tom-up processes, market forces, creativity in educational institutions, and information and communication technologies.

The most important contribution European governments and international organizations could make is in the field of knowledge management. A strategic meeting of experts from governments, international organizations and the educational sector could outline the framework of a European management plan on learning for sustainability. The European Commission would be very well placed to take the lead. UNESCO might do the same at the global level.

Notes

1. The author wishes to thank: **Teresa Andresen**, Professor of Environment and Communication, Universidade de Aveiro, Portugal; **Harm Blanken**, Senior Consultant, NovioConsult, Nijmegen, Netherlands; **Magdalena Blidberg**, Senior Officer, Communication and Project Management, Information Department, Swedish Environmental Protection Agency, Stockholm, Sweden; **Eva Csobod**, Department of Environmental Education and Communication, Elte University, Budapest, Hungary; **Susana Calvo**, Jefa de Servicio del Gabinete Técnico, Ministry of Environment, Madrid, Spain; **Walter Leal Filho**, Professor of Environmental Education and Environmental Technology, University of Hamburg, Germany; **Kamelia Georgieva**, Project Manager, ARD-GEF Biodiversity Project, Sofia, Bulgaria; **Elaine Geyer-Allély**, OECD Environment Directorate, Paris, France; **Douwe Jan Joustra**, Programme Manager, Inter Departmental Programme 'Extra Impulse Environmental Education 1996–2000', NCDO, Amsterdam, Netherlands; **Monica Lieschke**, Managing Director, Forum Umweltbildung, Vienna, Austria; **Eddy Loosveldt**, Senior Governmental Advisor, Flemish Community – Aminabel, Brussels, Belgium; **Elda Moreno**, Council of Europe, Environment, Conservation, Management and Regional Planning Division, Centre Naturopa, Strasbourg, France; **Norbert Reichel**, National Coordinator of Education for Sustainable Development, Dusseldorf, Germany; **Alena Reitschmiedova**, Head of Environmental Education and Public Participation Department, Czech Environmental Institute, Prague, Czech Republic; **Sergio Santos**, President FEEE, European Coordinator Ecoschool Programme, Wigan, United Kingdom; **Stephen Sterling**, Consultant Environmental Education, Dorchester, United Kingdom; **Jur de Vos**, Senior Consultant, SME MilieuAdviseurs, Institute for Environmental Communication, Utrecht, Netherlands; **Arjen Wals**, Researcher, Environmental Education Research Group, Wageningen Agricultural University, Netherlands; **Sheila Winstone**, Head of Communications, Scottish Environmental Education Council, University of Stirling, Scotland.
2. See, for example: OECD, *Sustainable consumption and education*, Paris, OECD, 1998; European Union, *Environmental education and training (Conference background paper)*, Brussels, European Union, 1999, www.europa.int/comm/dg11/eet/bgp.pdf
3. See Michael J. Scoullas, ed., *Environment and Society, Education and Public Awareness for Sustainability*, proceedings of the international conference held in Thessaloniki, Greece, 8–12 December 1997, organized by UNESCO and the Government of Greece.
4. Greetje van Wijnen, *Verslag Workshop Social Marketing en Milieu*, SME MilieuAdviseurs, Utrecht, 1997, p. 12.

5. Ibid., p. 21
6. See e.g. BundesMinisterium für Umwelt, Jugend und Familie, *Europa Forum for Sustainable Mobility in Tourism, Innovative Models and Pilot Projects*, Conference within the Austrian Presidency of the European Union, Bad Hofgastein, Salzburg, 9–11 December 1998; *Wintersport 2005*, Travel Unie International, 1999.
7. Greetje van Wijnen, op. cit.
8. See Cees van Woerkum, *Communication and interactive policymaking*, Wageningen University, Group Communication and Innovation Studies, 1999.
9. See e.g. Frits Hesselink, Communicating nature conservation, five frequently made mistakes, *European nature* (ECNC, Tilburg), no. 2, May 1999, p. 10; Susana Calvo and Ricardo de Castro, Entrevista a Frits Hesselink, *Ciclos* (Buenos Aires), no. 5, June 1999, p. 9–11.
10. A number of successful local Agenda 21 projects in European countries have been detailed in individual publications. One example of good practice from Spain is: Ajuntament de Calvia, *Calvia Local Agenda 21*, Mallorca, Municipality of Calvia, 1999.
11. Douwe Jan Joustra, Environmental education: the impact of an impulse, in: Eric van de Aa et al., eds. *New and improved? Snapshots of the first two years of Extra Impulse-Environmental Education*, p. 9, Amsterdam, Nationale Commissie voor internationale samenwerking en duurzame ontwikkeling, 1999.
12. United Kingdom, Department of the Environment, Transport and the Regions, *Sustainable development education panel, first annual report 1998*, London, DETR, 1999; the same is true in the Netherlands where a new policy document has been put forward to Parliament, which positions ESD outside the classical community of environmental educators.
13. European Conference on Environmental Education and Training, 3–4 May 1999; see European Union DG-11 website: www.europe.eu.int/comm/dg11/eet/index.htm
14. Address: ICA, Kardinaal Mercierlaan 92, B-3001 Heverlee, Belgium.
15. Hans Christian Lillehagen in *Report of the Pan European Expert Meeting 'Environmental Education and Sustainable Development'*, Soesterberg, 27–29 January 1999, Amsterdam, Nationale Commissie voor internationale samenwerking en duurzame ontwikkeling, p. 57–58; or: www.nme-rotonde.nl/bibliotheek/001052/index.html; www.wbcsd.ch/foundation/
16. NME rotonde: www.nme-rotonde.nl
17. See www.xs4all.nl/~esdebate
18. Conference website: www.crossroad.de/millennium
19. See the following websites: culture.coe.fr/postsummit/citoyennete; www.nscentre.org; www.nature.coe.int

EDUCATION FOR ALL

TEN YEARS AFTER JOMTIEN

Svein Osttveit

Introduction

In March 1990 in Jomtien, Thailand, some 1,500 participants met in order to address the critical importance of providing basic education for all. It was recognized that, following a slowing down of school enrolment in several regions throughout the 1980s, mobilization of new partnerships and support for basic education were urgently needed. A declaration and framework for action were agreed upon which encouraged action at global, regional and national levels. Each government was asked to set its goals and objectives on the basis of the Jomtien Declaration and Framework for Action. It was agreed that the crucial part of education is not mere school attendance but learning. In this connection, it was recognized that school enrolment would frequently give a false impression of the efficiency of a particular education system where learning achievement is often dismally low. The quality of education was thus presented as ultimately more important than mere access to schooling.

The World Declaration on Education for All underlined the importance of 'meeting basic learning needs' for all and set out an expanded vision and a renewed commitment. This expanded vision would encompass:

- universalizing access and promoting equity;
- focusing on learning;

Original language: English

Svein Osttveit (Norway)

Executive Secretary for the EFA Forum since 1998. Previously a secondary teacher in Norway. Joined UNESCO in 1989 to work in the International Literacy Year Secretariat, transferred to the section on Educational Policies and Management in 1991, and became Chief Technical Adviser on a project in Mongolia on distance education for nomadic women in 1993. In 1996 reintegrated into the UNESCO Headquarters to work on the Special Project for Marginalized Youth. E-mail : s.osttveit@unesco.org

- broadening the means and scope of basic education;
- strengthening partnerships.

The Framework for Action encouraged countries to set their own targets for the 1990s around the following six dimensions:

1. expansion of early childhood care and development;
2. universal access to and completion of primary education by the year 2000;
3. improvement of learning achievement;
4. reduction of the adult illiteracy rate;
5. expansion of basic education and training in essential skills required by young people and adults;
6. increased acquisition by individuals and families of the knowledge, skills and values required for better living and for sustainable development through all educational channels.

At the central level, the Education for All (EFA) Forum was officially constituted on the initiative of the five conveners—the United Nations Development Programme, the United Nations Educational, Scientific and Cultural Organization, the United Nations Population Fund, the United Nations Children's Fund and the World Bank—with the following objectives:

- to monitor progress by countries and organizations towards education for all;
- to ensure that basic education remains on the world's development agenda (advocacy and information);
- to promote dialogue and co-operation among Education for All partners.

UNESCO, whose mandate gives the highest priority to education, offered to host the EFA Forum Secretariat, which was consequently established in Paris at UNESCO Headquarters in order to execute the programme approved by the EFA Forum Steering Committee. This Steering Committee has a very broad representation of all major partners at international level involved in different ways in supporting and developing education for all world-wide. The members include, in addition to the above-mentioned conveners, UNDESA, the World Health Organization as well as other international governmental bodies, all major bilateral donors, a broad representation of leading non-governmental organizations and regional representation.

Progress since Jomtien

In 1996—six years after Jomtien—participating nations reconvened in Amman, Jordan, for a mid-decade review of progress. Significant achievements were documented. More than 100 countries had developed explicit EFA goals and strategies, and it was clear that the Jomtien goals and principles enjoyed continuing widespread support. An estimated 50 million more children were enrolled in primary school than in 1990, and even despite sizeable population increases the numbers of out-of-school children were declining.

Nevertheless, it was clear that millions of people remain untouched by the optimism of Jomtien and that much of its promise remains unfulfilled. Education may be high on the rhetorical agendas of governments, but all too many commitments

remain unmet. There are too few early childhood care programmes in developing countries, and in all too many countries poorly qualified teachers are still working for low pay amid deteriorated infrastructures. Entire sub-regions in the developing world, most notably in sub-Saharan Africa, are severely constrained by lack of education. Some 100 million children aged 6 to 11 remain out of school, and a further 150 million, including adolescents, have dropped out without acquiring basic levels of literacy. This is not just a developing country issue: one in five adults in industrialized countries cannot read or write a simple text.

Gender disparities persist. Although great strides have been made, nearly two-thirds of children who are denied their right to an education are female. Girls' education has been extensively documented as the investment that offers the largest overall returns for economic development, yet national policies do not reflect this insight. The Amman meeting redefined girls' education as the priority among priorities.

Endemic poverty and gravely unequal distribution of wealth across all regions are among the uneasy legacies that we and our children inherit as we cross the threshold from one century to the next. As people are drawn inexorably to metropolitan centres, rural-urban gaps widen. Information technologies threaten to divide societies into those who use them and those who for various reasons do not. Preventable health problems adversely affect school attendance and learning. Massive debt repayment requirements in some parts of the world ensure that more is spent on meeting debt obligations than on primary education.

The World Education Forum in Dakar

During the decade since Jomtien a succession of global conferences and reports on social development have affirmed the eradication of poverty as the necessary condition for development and the importance of education as a primary means towards that end. The Social Summit in Copenhagen placed education squarely at the centre of anti-poverty strategies. The Children's Summit, and the meetings in Rio, Beijing, Salamanca, Cairo and Hamburg, echoed these themes.

The stage is now set for the countries of the world, individually and collectively, to adopt a stronger, more action-oriented approach to the goal of universal basic education. This is the purpose of the World Education Forum, to be held in Dakar, Senegal, from 26 to 28 April 2000.

Discussions in Dakar will reflect the circumstances and imperatives of the new millennium. The forces of globalization, market liberalization, freer movements of human and capital resources across national boundaries, and the pervasive influence of microelectronics are transforming not only how people learn but also the nature of what they learn and how they use it. As skills requirements for livelihood-sustaining employment increase, basic learning becomes ever more essential for work as well as for proceeding to secondary and higher levels of education.

This turbulence and unpredictability surrounding our lives give daily new meaning to the imperatives in the Jomtien commitments. The gulf is widening between those who have access to information and communications technologies—e-mail,

e-commerce and e-learning—and those who do not. Trends towards privatizing education and the associated withdrawal of the State are raising the stakes for families and children living in poverty. Closing the education gap is a first step towards closing the income gap.

Extraordinary opportunities are available today that were not present a decade ago. A global consensus has been forged regarding the critical importance of education for more sustainable human development, and the advantages to societies of educating girls and women are now widely acknowledged. New synergies are beginning to develop around more comprehensive school-governance systems and the need to engage a broad set of actors in educational planning and practice. The promises of technology, while still ambiguous and undefined, offer enormous potential for enhancing educational outreach, accessibility, self-paced learning and meticulous assessment of the individual learning process.

Thus the continuing relevance of the Jomtien Declaration is clear. The world community understands that education for all is pivotal in addressing deepening poverty, sustaining socio-economic progress and respecting the rights of every person. Lacking are the necessary resources and political will to meet commitments made at Jomtien.

Education for All 2000 Assessment

In preparation for the Dakar Forum, each country was invited to re-examine its own situation with regard to the basic learning needs of all its people. By means of the Education for All 2000 Assessment, countries were asked to spell out what has been learned, identify successes and shortfalls, and suggest the most promising directions for the future that can be pursued with the help of the international community.

National teams have carried out these actions at country level, assisted by sub-regional technical advisory groups. In addition, global and regional thematic studies have been conducted on educational issues of global concern, such as literacy and non-formal learning, as well as surveys on the conditions of teaching and learning. Results are being reported to regional meetings.

Information and suggestions gathered through the EFA 2000 Assessment will then be used in drafting a new Framework for Action setting out a new set of priorities for global attention in Dakar. Countries will not be asked to change the Declaration, only to enter into a new global compact and action plan to ensure that its goals are achieved and its commitments met.

The final determination of global priorities will await the regional meetings and special studies. In the meantime, however, a global campaign and action plan are proposed in order to increase awareness of the need for renewed and sustained political commitments for basic education for all. Global action should be planned within the overall framework of anti-poverty strategies and build explicitly on the results of the country assessments, with the ongoing support of accurate and credible statistical indicators. A central component of the global compact must be the focus on sub-regions with special problems, such as sub-Saharan Africa.

Dakar Framework for Action

The Framework represents a bottom-up process, resting as it does on the outcomes of the new assessment. Its purpose is to guide, empower and enable national leaders, working through partnerships at the local through global levels, to meet the basic learning needs of all by 2015. The Framework will reaffirm existing international promises contained in the Jomtien Declaration, and its fundamental message can be simply stated: *maintain the vision; keep the commitments*.

The Jomtien Framework urged countries to set time-bound intermediate targets for meeting the basic learning needs of all children, young people and adults. The proposed Dakar Framework expands on themes of the Jomtien Declaration and proposes five operational goals as well as five strategic objectives for meeting those goals. Global targets are offered for the operational goals.

Six major principles underlie the content of the Framework:

- an uncompromising commitment by governments, civil society and the international community to including all who are discriminatorily excluded as full participants in high-quality comprehensive basic learning processes;
- recognition of the need for a beneficial learning climate for the ‘whole child’;
- stimulating more effective links between new technologies and basic learning;
- concrete goal-setting and explicit targets for achievement at national and local levels that reflect internationally established criteria;
- a more prominent role for and engagement with civil society;
- better collaboration, information-sharing, transparency and accountability with regard to all actors.

Operational goals

The five proposed operational goals and accompanying targets are:

- **Expanded early childhood care and education.** Research world-wide has established the value of programmes that ensure that young children are physically and mentally healthy, emotionally secure and intellectually able to learn. Target: *early childhood care and education opportunities available to all children, from newborn to school entry, by 2015.*
- **Universal free primary education.** Since basic education is integral to eliminating poverty, universal and free access must be ensured to all children, especially those who belong to excluded groups. Target: *universal, equitable access to, and completion of, basic education for all by 2015.*
- **Meeting basic learning needs of young people and adults.** Basic learning skills and competencies are the prerequisite for young people and adults to develop their full capacities, to work, to make informed decisions and to continue learning. Target: *universal, equitable access to basic learning and life skills programmes for all young people and adults by 2015.*

- **Quality/achievement.** School attendance is not an end in itself. Improvements in learning must occur such that an agreed percentage of appropriate age cohorts, or other defined learner groups, attains or exceeds nationally defined and objectively measured levels of achievement that are useful to both learners and society. Target: *measurable improvement attained in educational quality and the assessment of teaching and learning by 2015.*
- **Elimination of gender disparities.** Gender discrimination of all kinds must be eliminated in the nature of classrooms, schools and education systems. Target: *gender parity, at least through age 15, in basic education programmes (access and completion) by 2015.*

Strategic objectives

The five proposed strategic objectives are:

- **Enhanced national investment and effective resource mobilization.** Progress in meeting the basic learning needs of all will depend ultimately on the actions taken within individual countries consistent with their special circumstances. Technologies must be harnessed, managerial capacities enhanced, partnerships strengthened and necessary resources made available for teachers to do their job.
- **A 'new space' for communities and civil society.** A new political and social 'space' must be created to engage learners themselves, civil society, parents and communities in sustained dialogue, decision-making and innovation around basic learning. Building bridges with other basic social services and better articulation with other institutions such as universities and research institutes will be important aspects of this space.
- **Linking basic education to anti-poverty strategies.** Since education is one of the most effective tools for ending poverty, especially among women, national anti-poverty strategies must be explicitly woven into education policies, and vice versa.
- **Harnessing new technologies.** Rapidly changing information and communications technologies must be harnessed to meet basic learning needs as well as to reduce, not exacerbate, economic disparities related to geographical location and other factors. Each country should institute a periodic process of re-evaluation of the availability, suitability and utility of these technologies for all aspects of basic learning.
- **Enabling teachers.** Teachers must be acknowledged and supported more practically and technically in their work. Compensation, training and other human resource strategies should be routinely assessed, and threats to teachers' sustained contribution, such as gender discrimination and irregular or inadequate pay, must be openly identified and remedied.

It is hoped that this new Global Framework for Action, which is squarely built on the outcome of the EFA 2000 Assessment and which will be submitted for endorsement in Dakar, will spur all relevant partners to action so that the goal of educa-

tion for all can indeed be realized before the year 2015. The World Education Forum in Dakar could thus become a turning point where the foundation was laid for the necessary political will and community demand and involvement needed for achieving this global objective.

E D U C A T I O N F O R A L L

EDUCATION, CULTURE

AND INDIGENOUS RIGHTS:

THE CASE OF EDUCATIONAL

REFORM IN BOLIVIA

Sonia Comboni Salinas and José Manuel Juárez Núñez

Introduction

Today, more than ever before, Latin America is striving to enter the modern world, a goal never fully attained, perhaps because the quest for it was perceived as the exclusive preserve and privilege of elite groups whose intention had always been

Original language: Spanish

Sonia Comboni Salinas (Mexico)

Teacher and researcher at the Universidad Autónoma Metropolitana, Xochimilco, and a specialist in educational sociology. Former director of the National Office for Technical and Educational Services of the Bolivian Ministry of Education, and educational and cultural adviser to the Vice-President of Bolivia. Former director of the Department of Social Sciences and Humanities at the Universidad Autónoma Metropolitana, Xochimilco. Recent research and publications include studies on teacher training, innovations in curriculum development, new methods of evaluation, education and identity building in multicultural societies, educational policies in Latin America and in multicultural and multilingual contexts. E-mail: scomboni@cueyatl.uam.mx

José Manuel Juárez Núñez (Mexico)

Teacher and researcher at the Universidad Autónoma Metropolitana, Xochimilco, and a specialist in sociology and educational planning. Currently head of the Education, Culture and Social Processes Research Laboratory of the University's Department of Social Relations. Former director of the Planning Department of the National Office for Technical and Educational Services of the Bolivian Ministry of Education. World Bank consultant. Recent research and publications concern teacher-training issues, innovations in curriculum development, the development of education in urban settings, and educational policies in Latin America and in multicultural and multilingual contexts. E-mail: jjuares@cueyatl.uam.mx

to impose a form of modernity that was no more than an imitation of European or North American models. The refusal to recognize the specific roots, identities and potential of Latin American communities has kept a considerable proportion of the population—namely the many indigenous peoples who are still well represented on our continent—in poverty, ignorance, isolation and despair. The homogenizing tendency characteristic of the processes of modernization involved in building nations on the European model left no room for the multicultural dimension typical of this part of Latin America. The field of education clearly reveals the results of this policy, since schooling has been geared to expressing this desire for Latin-ness, to the detriment of anything that might deviate from the homogenizing paradigm.

Despite this trend towards uniformity, Latin America remains a rich and culturally complex area embracing approximately 50 million indigenous people, nearly 400 different indigenous groups and a multitude of languages, dialects and cultures, both aboriginal and the product of European and African migration.

With the possible exception of Uruguay, no country in Latin America can escape this reality, which has been deliberately hidden from view, especially in relation to the Amerindian question. In many instances and over several centuries, indigenous peoples were reduced to a state of invisibility by a process that, fortunately, has now been partially reversed. While circumstances vary in each country, indigenous people today are not only increasingly visible, but also play an ever more important and active role, even when they are strongly 'minoritized',¹ as in Colombia and Chile, or are on the verge of extinction, as in the case of certain indigenous groups in the Caribbean and in Amazonia. When their numbers are greater, as in Bolivia and Guatemala, where indigenous peoples account for over 60% of the population, more serious attention is paid to their demands and to the challenge they represent to governments. Evidence of this can be found not only in the many claims found in the clandestine histories of the indigenous peoples, but also in recent events that have taken their rightful place in the long record of contacts and conflicts—and sometimes, fortunately, of dialogue and agreement—between the leaders of the continent's indigenous peoples and their opposite numbers in the governments of the States to which they now belong. Among recent events marking the troubled relations between indigenous and non-indigenous peoples, the three most important, in our view, have been the 1990 indigenous uprising in Ecuador demanding more equitable relations between indigenous and non-indigenous peoples; the 1991 'March for the territory and dignity of the indigenous peoples of Oriente' in Bolivia; and the ongoing struggle in Chiapas (Mexico) for democracy, respect for differences, equality of opportunity and bilingual education.² We also wish to draw attention to the fact that, in spite of obstacles, some members of indigenous groups in Latin America have attained positions that until fairly recently were closed to anyone who did not belong to the white or Creole-Mestizo section of the population, such as Rigoberta Menchú, winner of the Nobel Peace Prize, Alfredo Tay, Minister of Education of Guatemala and Víctor Hugo Cárdenas, Vice-President of Bolivia.

Against this background of diversity and relative cultural revival on the part of the indigenous population, it is essential to re-examine the education system and make it more tolerant of cultural and linguistic pluralism, as well as more capable of coping with differences. Pluralism and differences can be exploited as educational resources fostering the personal and social development of students who are neither Spanish- nor Portuguese-speaking and whose individual and educational aspirations have been constantly frustrated—or at the very least limited—by the symbolic violence perpetrated by schooling that ignores their specific learning needs.

In this context Bolivia is instituting various constitutional and legislative reforms that should help to build a different nation and to lay the groundwork for a process of democratization and development with greater and willing participation by all sectors of the population, acting through their own organizations and drawing upon their own cultural, technological and societal viewpoints. This article presents the educational reform under way in Bolivia, highlighting its psycho-educational foundations through an analysis of its organizational and curricular structures, and showing how they promote the linguistic and cultural rights of the different population groups, thereby producing a more equitable and better-quality education system.

Cultural identity and diversity as the foundation for educational reform

Bolivia³ provides an interesting case for a study of the initial processes involved in the exercise of linguistic and cultural rights to promote the autonomy of the indigenous peoples living in Latin America. It has also become an important example of the attempt to introduce a more equitable education system, while ensuring the high standards needed for national development that encourages and contributes to the creation of genuine, widespread and participatory democracy for the entire population. In fact, Bolivia is a predominantly indigenous country, yet, like the other countries of the region, has opted from the birth of the republic for linguistic and cultural uniformity—nation-building involved the incorporation of the indigenous peoples in the dominant, Spanish-speaking, Creole-Mestizo culture.

At various times during the colonial and republican eras, indigenous groups sought to legitimize their own organizational structures and claimed the right to their own languages and cultures. Nevertheless, it was not until 1991, in response to a massive demonstration known as the 'March for Dignity' in which indigenous peoples of all surviving ethnic groups and their representative organizations took part,⁴ that Bolivia began to consider the possibility of involving these groups in the country's socio-economic and cultural life. It was not until 1993 that the government instituted a series of structural reforms to the majority of the country's laws with a view to granting indigenous peoples the free exercise of their rights as citizens and recognizing Bolivia as a multi-ethnic, multilingual and multicultural country. This was achieved through the introduction of a new article, the first in the

Political Constitution of the Bolivian State. Congress recognized two fundamental laws: the Education Reform Act, which established intercultural bilingual education throughout the country; and the Popular Participation Act, which accepted ethnic, cultural, linguistic, regional and gender differences and provided for decentralization, territorial reorganization and the funding of municipal budgets according to the number of inhabitants and their development needs. It also recognized indigenous municipalities, including their authorities and the manner in which they were elected and exercised power, within the framework of the Political Constitution of the State.

Intercultural bilingual education—an arena for the exercise of indigenous linguistic and cultural rights

From their inception, indigenous schools and education were seen as instruments for the attainment of the governing minority's political and cultural objectives. This included the building of a Bolivian nation by the same process used to Christianize, westernize and Hispanicize the indigenous majorities and to 'erase' their ethnic differences by making them all peasant farmers. This explains why, even today, most indigenous peoples in Bolivia prefer to be known as 'farmers' rather than as members of a particular ethnic group, such as the Quechua, Aymará or Uro.

Against that background, the only linguistic right granted to the population was to learn Spanish—the language spoken by the ruling minority. At the same time, a slow but steady process was initiated of discouraging the use of the ancestral national languages, in keeping with the country's commitment to achieving linguistic and cultural uniformity.⁵ To make the process effective, rural education was bolstered and primary education in Spanish was made compulsory for indigenous children. The development of rural education over the last four decades has not only led to the democratization of education, but has also signalled the start of a process of unlearning indigenous languages and cultures, with the resulting gradual loss of traditional knowledge and skills and, more fundamentally, the violation of the right to an identity and to be different.

Despite all this, as noted above, more than 60% of Bolivia's inhabitants are indigenous and define themselves as speakers of a vernacular language. The country is undergoing a sort of ethnic and cultural renaissance in which reforms of the legal system and the political organization of the State are based on recognition of the civil, cultural and linguistic rights of the indigenous peoples who live there. The recent amendments to the Political Constitution of the State recognize, in Article 1, the multi-ethnic, multicultural and multilingual nature of Bolivia. Furthermore, the intercultural bilingual education programmes introduced over the past few years have helped to strengthen the social and political status of indigenous languages, opening the way for generating knowledge and educational experience that have led to considerable changes in the Education Code.⁶

Institutional and curriculum reform

In response to the acute crisis in the education system, the educational reform proposes substantial and comprehensive changes whose fundamental principles are based on interculturality, bilingualism and popular participation. This approach involves a search for new ways of understanding and shaping reality.

The institutional and curriculum reforms are based on a socio-educational approach emphasizing changes in educational practice. To that end, efforts are being made to provide the institutional and curricular conditions needed to reform the system. For example, school administration and organization have been devolved to levels that are closer to the nuclear school, thereby reintroducing the principles of nuclearization first developed by Elizardo Pérez in the Warisata school project.

Educational reform in Bolivia views diversity as a comparative advantage and a resource for the transformation of the entire system. Accordingly, intercultural education is being promoted not only for indigenous learners but for everyone—indigenous and non-indigenous, rural and urban, vernacular- and Spanish-speaking. The belief is that only by including all pupils in the system—and Spanish-speakers in particular—will it be possible to modify the asymmetry and diglossia (diglossic speech communities have a high variety that is very prestigious and a low variety with no official status) that still characterize relations between indigenous and non-indigenous peoples and between aboriginal languages and Spanish.⁷

Interculturality is viewed as a force that can breathe new life into the curriculum and liberate the education system from its current state of paralysis. It is hoped that an intercultural approach will contribute to the radical transformation of Bolivian society, making it more democratic and less unequal, a place where indigenous and non-indigenous peoples can coexist and work together towards the multi-ethnic, multicultural and multilingual society referred to in Article 1 of the Constitution. To achieve this, it is not enough to recognize the right of indigenous learners to use their own languages at school and to receive instruction in them. In rigidly hierarchical diglossic societies, like all those in indigenous Latin America, additional measures are needed: Spanish-speakers must also change their attitudes and behaviour in order to enhance the status of indigenous languages and traditions, the latter regarded as a valuable resource for living together in a multicultural and multilingual society.

Marginalized populations will not be able to enjoy and benefit from their rights unless members of the ruling classes have a corresponding duty, at the very least, to tolerate and respect other, 'alien' cultures. Furthermore, given that diglossia exists, any measures concerning Spanish-speakers will inevitably have a beneficial impact on speakers of vernacular languages, firstly, because such measures will help to change attitudes towards indigenous peoples and, secondly, because they involve a political, social and cultural reappraisal which should help to reposition the indigenous languages in national life, including in the indigenous communities themselves.

In addition to regarding diversity as a comparative advantage and a resource, the newly reformed education system has adopted an intercultural approach. This

involves not only the inclusion in the curriculum of contents based on the skills, knowledge, values and attitudes of Bolivia's various indigenous groups, but also teaching practices, methodologies and, above all, the development of a new teaching system based on the need to make room for dialogue, exchanges and comparison of viewpoints and ways of interpreting and understanding reality and the surrounding world. This intercultural approach arises from the need to provide schools with a rational system of communication in which teachers and pupils, in continuous contact with the natural and social world, combine to meet the basic learning needs of both students and society. Bolivia is endeavouring to rebuild the State on the basis of the positive acceptance of its diversity and the recognition of the need to decentralize decision-making and assign greater real authority to grass-roots communities. This is the context in which the Education Code, as amended by Education Reform Act 1565 of July 1994, establishes interculturality, bilingualism and popular participation as the key elements of educational reform.

To understand the decisions taken by the Bolivian authorities, it should be recalled that the majority of the country's learners speak vernacular languages even when they have some mastery of Spanish, and that their behaviour and attitudes are shaped by traditional cultural patterns. Furthermore, indigenous languages and the cultures they transmit permeate the daily life of a large majority of, if not all, Bolivians. What is more, these circumstances give rise to a variety of demands and proposals similar to those that inspired many of the policies and measures to be implemented in the framework of the educational reform.

For example, the Intercultural Bilingual Education Programme⁸ was designed specifically to meet such needs and to respond to and respect the claims and linguistic rights of Bolivian peasant farmers. The lessons learned from the programme also had an impact on the shape of educational reform in Bolivia.

With the introduction of educational reform based on the principles of interculturality and popular participation, with special emphasis on intercultural bilingual education, it became possible to implement at national level language education policies which otherwise would probably have not gone beyond the proposal stage. This paved the way for the State and the various bodies and agencies concerned with indigenous languages to assume responsibility for guaranteeing the linguistic and cultural rights of the indigenous peoples, making them one of their principal objectives.

In fact, measures like the Popular Participation Act and the Education Reform Act underpin the building of a new State in which pluralism is no longer regarded as a problem. Moreover, educational reform in Bolivia is not an isolated phenomenon, but the beginning of a process closely linked to other efforts in progress. These are aimed not only at discovering and acknowledging the country's genuinely pluralistic nature but also at presenting diversity as a resource for building pluralistic democracy and ensuring more equitable and sustainable development. It is therefore not surprising that the demands and proposals of civil society overlap those of the indigenous peoples at many points, and especially with regard to educational reform and the new Education Code underlying it. One illustration is the declaration made in

1991 by the *Confederación Única de Trabajadores Campesinos* (CSUTCB—Consolidated Confederation of Rural Workers) as a result of its involvement in the development of intercultural bilingual education in Aymará, Quechua and Guaraní schools. The rural workers' main concerns, as reflected in their declaration, are the need for quality education and recognition of their ethnic identity. They claimed, for example, that 'rural workers should not accept the use of the Education Code of Bolivia as an attempt to erase our historical, cultural and linguistic identity'.⁹

What the rural workers were openly criticizing was the linguistic policy of the education system in place at that time. Even though nine years had passed since the time when, under the banner of the UDP,¹⁰ political, cultural and linguistic arguments had been advanced in favour of education in their own languages, very few schools (114) were providing bilingual education to Aymará, Quechua and Guaraní children. In their proposal entitled 'Towards bilingual intercultural education', the workers stated that:

The first major problem is that the education system ignores our languages and cultures; no effort is made to ensure that teachers speak the language of the community and its children and, as a result, the boys and girls cannot learn properly. Sometimes our children manage to decipher or read a written text, but they do not understand what they are reading. Schools continue to apply the old and anti-educational policy of Hispanicization. Even the Church no longer celebrates the mass in Latin, yet rural schools still say their prayers in compulsory Spanish [...]. In the schools today even Spanish is not well taught, while use of the children's own languages is prohibited. Teachers, alas, do not get any training in how to teach a new language; moreover, because the teachers themselves are not properly taught. They misuse Spanish and make mistakes in pronunciation, spelling and grammar. This has the effect of further confusing our children.¹¹

With regard to the use and enjoyment of linguistic rights, the rural workers repeatedly stated that they wished their children to 'learn, speak, read and write correctly in our own languages. At the same time, we wish them to speak, read, write and learn correctly in Spanish'. They stressed that 'there can be no genuine educational reform without a linguistic policy that defines which languages are to be used in school, and when, how and in which regions'.¹²

It should also be noted that in their declaration the workers were moving in the same direction as the present-day educational reform in Bolivia—albeit without sufficient clarity. They emphasized the need to change the content of urban education with a view to 'respect and harmony among the different cultures and languages, and pride in the existence of such great cultural wealth'.¹³

A new view of the curriculum: basic learning needs

As already mentioned, the plan for educational reform is based on the country's ethnic, linguistic, cultural and regional diversity and is designed to strengthen the specific identity of each social group by fostering knowledge of it and respect for

and recognition of differences. This intercultural approach is part of a plan to democratize education by providing equal opportunities regardless of social, ethnic or regional origin. From this perspective, freedom is grounded in knowledge and the possibility of continuing to develop knowledge and skills that are linked to the daily life of every individual and community. The response of education to the felt and objective needs of learners is one of the philosophical building blocks of education.

Society is able to meet some of its learning needs through contact with the social and natural environment. But there are other needs that cannot be satisfied in this way and have to be met by the school. Education begins to play a meaningful role when the satisfaction of learning needs relates to social requirements, when teaching is relevant and fully assimilated, and learning is effective and sustained. This becomes possible when the curriculum is shaped by social needs and is oriented towards meeting them.

Basic learning needs can be defined as learning that enables and ensures the acquisition of skills, abilities, capacities and knowledge, the development of attitudes and the internalization of values that people require to be able to satisfy their needs and consequently improve their quality of life and that of the society to which they belong.¹⁴

This new approach to the curriculum derives from a view of learners as the architects and builders of their own learning process and the recognition of the practical skills acquired in the course of everyday life. This concept has profound revolutionary implications because it recognizes knowledge acquired collectively through the social representations prevalent in a particular society. Students are no longer regarded as a *tabula rasa* on which everything has to be inscribed; on the contrary, they possess creative minds and productive imaginations and are active agents in their social and natural settings, i.e. people rooted in reality. This approach places the learner at the heart of the knowledge-generating process, as the subject of the learning process.

Efforts to transform the curriculum will not work unless they are accompanied by training which produces a new kind of teacher, capable of reading and interpreting the signs of the times and adapting teaching methods to emerging needs. This new teaching system comes to life in the classroom and grows out of the inter-relationship between participants in the creative process.

It should be borne in mind that this approach shifts the emphasis from the content to the process of constructing and assimilating knowledge and using it to solve the crucial problems of the students.

These guidelines find expression in the parallel processes of curriculum reform and institutional restructuring. The new curriculum, which is designed to encompass and integrate knowledge, is open and flexible enough to incorporate, modify and adapt its contents as a function of basic learning needs.

Meeting these needs implies a diversified curriculum. Such diversity has various facets, one of which relates to Bolivia's cultural and linguistic heterogeneity. Interplay between peoples of different origins, cultures and languages requires spe-

cial training and respect for differences. The *intercultural approach* of the educational reform movement and consequently of the curriculum is designed to meet this type of demand.

Another reason for diversifying the curriculum is to provide a variety of ways of meeting the many different learning needs. This has led to the use of *diversified teaching methods*, i.e. a wide range of learning strategies, resources and facilities tailored to the specific needs of the students.

Lastly, the new curriculum takes the form of a common core with diversified branches in order to meet the needs of society as a whole as well as the special needs of local communities.

Common core and diversified branches

The *common core* reflects national and universal social needs, based on the skills required by all Bolivian students. The *diversified branches* supplement the basic curriculum by taking into account the needs that arise in specific socio-cultural and linguistic contexts.

In the light of these considerations, the curriculum has been drawn up at both national and local levels. *At the national level*, the curriculum covers the major social requirements, i.e. what society considers that all students should learn.¹⁵ These subjects are included in the common core drawn up by the staff of the National Office for Technical and Educational Services and reach the classroom in the form of teaching modules. *At the local level*, the needs arising in each specific context are compiled and included in the diversified branches by teams of teachers assisted by educational advisers. They reach the classroom in the form of specific teaching materials produced in the context of nuclear and local schools.

It follows that a distinction has to be drawn between assigned—or national and universal—basic learning needs and perceived needs that are culturally specific to local communities.

Both the common core and the diversified branches are based on the identification and collective reshaping of the learning needs of students from differing socio-cultural backgrounds, and on the review and evaluation of a set of innovative experiments.

The assigned needs are taken up and collectively reshaped during the teaching process and they are adapted to perceived needs in nuclear schools and local classrooms. The identification of learning needs is not restricted to teachers and their ability to perceive them, but is a participatory process involving all those who are directly or indirectly involved in nuclear schools and local classrooms.

In the nuclear school, the various actors (teachers, members of the school board, students) apply the national and local guidelines, adapting them to the special needs of each educational context, which are the same as those that are satisfied in everyday classroom practice. This is why it is believed that the diversification of the curriculum is best reflected in the relation between learning and teaching.

The curriculum is organized into cycles, each cycle being a functional teaching unit that is closely linked to the individual child's learning rhythm and the assessment of achievement. This meets two concerns: teaching that is better adapted to each child's needs and a more systematic assessment of progress through a broader perspective and close collaboration among teachers in the same cycle. The cycle reflects continuity in time, being longer than a grade (two to three years) and more flexible, in order to follow the pace and progress of each student. As a result, the children develop skills based on their own learning rhythm. The cycles are not divided into grades, which is an effective way of ensuring the continuity of the learning process and avoiding the need to repeat years. As there are no grades, each cycle is organized essentially by levels. Each level consists of a group of children who have demonstrated similar learning aptitudes, or similar skills and work habits, so that they can provide each other with mutual support and learn together, thereby developing to the full their intellectual capacities, motor functions and social and affective lives.

The cycles provide a great deal of flexibility since they give children the opportunity of two or three years of uninterrupted study. The pupils progress at their own rate, interacting with their peers, with the teaching modules and with the teachers, who contribute to their progress by providing them with the most suitable educational resources.

Curriculum, attitudes and values

To survive, every society must ensure the production and reproduction of certain values that enable it to progress over time and transmit to its citizens the ethical and moral standards whose observance is necessary for the smooth functioning of the community as a whole.

In Bolivia, as elsewhere in the world, what is 'desirable' corresponds to the notions of order, discipline, effort, respect, obedience, coherence, rationality, honesty, creativity, critical thinking, solidarity, co-operation, teamwork, the desire to learn and perseverance. What has been called into question by the new approach to education is individualism, passivity, conformism and indifference. The very fact that we speak of 'inculcation' implies that a certain symbolic violence is involved in the transmission of values and, as a result, they become part of a 'hidden agenda'. However, the transmission and reproduction of values is not only an educational task; it is also a social one which begins with the family and whose aim is to establish standards and patterns of socially acceptable behaviour. The real problem here is that imposition rather than persuasion has been used to make students take responsible decisions.

Under the new educational approach, imposition is replaced by freedom of expression, debate and the confrontation of ideas, which teaches us to think and reason critically, to express our ideas in a coherent and logical fashion, and to tolerate difference. This calls for an educational environment that fosters pluralism and democracy—a very different situation from that obtaining in most schools.

The curriculum and transverse skills

At the dawn of the twenty-first century, it is vital to reflect on the future in terms of both needs and prospects. It is not enough to speak of honesty, obedience, dedication and perseverance. New attitudes call for new values and a new kind of education which can handle unforeseeable needs and training requirements that are entirely different from those we have known. Hence, the emphasis on transverse course content that fosters new attitudes, such as respect for others, solidarity and justice, a sense of responsibility, esteem for work and its achievements, values relating to peace (education for peace), the conservation of nature (environmental education), respect between the sexes (gender education), diversity (intercultural education), different languages (bilingual education) and other values that help young people to develop a broader outlook on the world. In this context, the desire to learn becomes a major issue in education and teaching policy, since it opens the way to learning to learn, self-learning and the systematic pursuit of intellectual activities.

One extremely important transverse element is education for justice and equity, which entails solidarity and mutual support. A related topic is education for democracy—not simply as a human value but as a State policy under which democracy is guaranteed, fostered and preserved. At the same time, young people must be taught both to exercise their rights and to fulfil their duties, which are the marks of a genuine democracy based on popular participation in decisions affecting the population as a whole.

Equality and diversity

Until the 1970s, democracy was taken to mean ensuring access to education. There was little talk of continuity and even less of completing the course and entering the job market. This *ex cathedra* model of education prevailed because the aim was to achieve uniformity by reducing differences. Making everybody equal was the democratic alternative.

Differentiation was regarded as a destructive element and a source of social inequality. The underlying goal of this perception was the satisfaction of the needs of the middle class, which had always viewed traditional education—meaning both the knowledge taught and the values transmitted—as the path to social integration. This meant that the entire focus was on content and no thought was given to methods. Any change in content was therefore regarded as detrimental to the interests of the middle classes.

Highlighting individual differences represents a significant theoretical and political change because it amounts to recognizing that diversity and inequality are two different concepts. In political terms, it means acknowledging that formally homogeneous processes can produce heterogeneous results and, inversely, that to obtain homogeneous results it is often necessary to accept and promote diversity in the process. In brief, there has been a growing awareness that national integration and social equality mean eliminating inequality rather than eliminating diversity.

The political response in the case of the Bolivian educational reform has been decentralization and greater autonomy for schools. The educational response is a flexible curriculum, respect for the individual learning rhythm of each pupil, and intercultural and bilingual education.

Curriculum reform has been accompanied by a new role for the teacher, who has become the pupil's travelling companion, a co-ordinator and facilitator of learning activities, rather than a repository of knowledge and dispenser of wisdom. This calls for new teacher-training methods encouraging teachers to reflect on and change their teaching practices—a difficult but not impossible task.

Self-determination for indigenous peoples

There is no doubt that the progress of a society can be measured by how well its education system functions. The future depends to a great extent on the quality of education and the amount of time that children and adolescents remain in the school system, as well as on the opportunities for adults either to make up for time lost during their school years or to enrol in continuing education courses. The training and education provided will determine the students' competence and ability to contribute to the building of equality and social justice within the national community, of which they are a part.

More than any other individual or collective activity, education contributes to the growth of the personality. It develops in individuals the abilities and skills that enable them to confront the problems arising from their surroundings, their social background and their desire for self-fulfilment, and to find appropriate solutions, thus helping to shape both a common and a personal future. The rapid pace of social change that constantly surrounds us makes education uniquely important because it allows us to keep up with changes, to give them meaning, to manage the future, and to adopt, create and transmit societal values. It can also help all members of society to be productive and to participate in the administrative, managerial, political and other processes connected with running the country and its assuming its place in the concert of nations.

Innovation, therefore, is part and parcel of the dynamism of the educational processes existing in every society, in particular those provided through the school system, because it is here that we can reach the bulk of school-age children. Changes in the field of education provide an opportunity to review teaching and learning methods. New approaches to administration and management theory can help to transform the administrative and organizational structure of the education system, making it more efficient and accessible to more people (children, adolescents and adults) and laying the foundations of a more equitable society by attempting to lessen inequalities and close the gap between the economically privileged and the marginalized.

At the national level, as we have already pointed out, constitutional, legal and administrative reforms are producing structural changes in society: the Popular Participation Act allocates financial resources to municipalities on the basis of their

total population, recognizes grass-roots local organizations and establishes a political and administrative structure that is more in keeping with geographical realities; the Administrative Decentralization Act authorizes departments and municipalities to make decisions at the local level and establishes a regional administration in functional co-ordination with the central administration; the Reform of the Constitution has extended the presidential mandate to five years; the Law against Violence in the Home is intended to strengthen the nuclear family and promote equal rights for men and women in a spirit of mutual respect and respect for children; the Maternal/Infant Social Security Act provides medical care for all pregnant women and their children, regardless of their social or economic circumstances; and the Old-Age Protection Act provides pensions for people over 65. These and other legal measures are radically transforming Bolivian society and laying the foundations for its development.¹⁶

The need to create a new education system, whose basic approach and focus are to ensure the participation of all the peoples and regions of the country, entails the reform of its institutional and organizational structure and its decision-making processes. As a result, the institutional framework has been reorganized, from the transformation of the National Education Secretariat¹⁷ into a body responsible for setting standards and laying down overall national policies to the creation of bodies and authorities at the level of departments, municipalities, and nuclear and local schools. The decision-making process has been decentralized to the municipal and local levels, thus providing an opportunity to take advantage of the potential and resources of a heterogeneous society by harnessing the knowledge and mobilizing the values, skills and cultures of each region and local community.

The programme of institutional reform is intended to transform the Ministry of Education, Culture and Sport and to reorganize the national education system, by strengthening education as an institution and giving it an organizational structure flexible enough to respond to management needs in a rapid and effective way. This programme of institutional strengthening involves decentralization in order to ensure the transition from a highly centralized system to management by each department, district, nuclear and local school.

The reform envisages community participation in the management and supervision of education, making it the responsibility of all. Thus the reform of the national education system is accompanied by the establishment of the mechanisms needed to modernize and decentralize management through the institutional transformation of the Ministry of Education, Culture and Sport and the entire education system.

Organization of the national education system into nuclear schools

Rural education in Bolivia has long been organized into a system of nuclear schools. Similar geographical, economic and social conditions made it necessary to seek a way of providing education for the entire school-age population. Accordingly, the

first concern was to increase the supply of education in order to meet the bulk of the potential demand, rather than merely satisfying all of the actual demand. But the methodology adopted was to stimulate demand rather than to increase the overall supply. Educational authorities have therefore been endeavouring to relate demand to supply, and to increase school coverage at all levels and in all cycles. A similar approach to curriculum development has had a positive impact on the students' level of attainment, by raising the quality of education and linking the educational process to the solution of community problems. In this way it is hoped that the learning community as a whole will be able to focus the educational process on the productive development of the natural resources in each area.

The nuclear school system consists of a central school providing education from pre-school to baccalaureate education, and local schools staffed by one or two teachers located in the various communities surrounding the central population hub. The local schools currently provide schooling up to the third year by the multi-class method, but the possibility of offering at least a full primary course in these schools (pre-school and eight years of primary education) is under study.

The nuclear school system in Bolivia has its roots in the Escuela Ayllu, which was expressly designed for rural education. Today, the educational reform movement is striving to revive and renew this experiment through mutual support and co-operation between the school and the surrounding community. To further the development of education, it is essential to have a global view of the area, neighbourhood or community, to determine the number of school-age children in each cycle and at each level, to channel demand towards the schools closest to where the pupils live, to distribute the student population more evenly among the schools of the nuclear system, and to provide a more complete teaching staff. Above all, there should be the joint and co-ordinated use of shared teaching, recreational and cultural facilities, such as the central library, workshops, scientific laboratories, literature, music and art rooms, gymnasias and sports facilities.

Use of these joint facilities for purposes of educational support means that resources can be centralized in the nuclear school, investments optimized and installed capacity fully utilized by students attending the various schools, as well as by the members of the communities in which they are located.

This co-ordination between school and community helps to strengthen mutual relations, thus enriching the dialogue that should exist between the school and society. The interplay between members of the community and the schools leads to a more integrated community and greater social participation. All these measures are clearly intended to improve the quality of education.

A new approach to educational administration

To attain these objectives the administration must be reformed so that it serves the cause of education rather than the other way round, as often happens at present. The administration has a direct impact on the educational process through cur-

riculum management. Administrative reform means radical changes in the prevailing centralist conception, and must give way to the devolution of functions and the taking of appropriate decisions at different levels.

Better educational coverage, greater efficiency and the effective use of resources call for a meticulous review of the geographical distribution of schools and curriculum management that is better adapted to the country's real needs. Accordingly, under the Education Reform Act 1565, which radically amends the Bolivian Education Code, 'the structure of curriculum management in the field of formal education comprises six levels: national, departmental, district, sub-district, nuclear and local'.¹⁸ This innovation in curriculum management and the reorganization of the nuclear school system seek to promote greater uniformity among schools and to make educational advisory services more responsive and effective. The Act eliminates the existing distinction between urban and rural education by providing that all schools must become part of the nuclear system. The purpose of this provision is to eliminate inequalities in education and make it possible to offer equivalent education in both town and country free of charge. At the same time, it should be possible to raise academic standards in all cycles and at all levels, while respecting the various cultures, languages, skills and organizational systems of the country's different regions and communities. A decentralized structure will be established enabling local authorities to construct and organize facilities in accordance with their own needs.

Participation in education

Education Reform Act 1565 establishes the principle of compulsory community participation in the planning, management and control of resources allocated to education. Thus, as in the case of curriculum management, six levels of participation, ranging from the local to the national, have been established, taking into account the indigenous and the Amazonian peoples, by providing for the permanent representation of the community on school boards and education councils. The intention is to make the entire population feel that it is both the subject and the object of the educational process and to give rise to closer collaboration between schools and parents.

The reorganization of curriculum management involves the establishment of a parallel system of community management and control, the aim of which is to ensure that educational activities have due regard to the linguistic and cultural needs of local communities:

- Each *school* must have a school board elected by the community or Organización Territorial de Base¹⁹ and composed of heads of families and local authorities. This is essential if men and women are to participate on an equal footing.
- Each *nucleus* must have a nuclear school board composed of representatives of the schools within the system.
- Each *district* must establish a district board composed of the mayor and municipal council, the district director and representatives of the various branches of the grass-roots organizations present in the municipality.

- Each *department* must establish a departmental council composed of the departmental minister of human development, the secretary of education, the director of education and representatives of the unions, businesses, teachers, the Catholic Church and indigenous associations present in the department.
 - At the *national* level, popular participation is provided by the National Education Board, chaired by the Minister of Education and composed of representatives of national associations, including the education councils of the indigenous and Amazonian peoples.
 - The *Education Council of the Indigenous Peoples* is a fundamental body active throughout the national education system, with legal authority to set guidelines for education in the nuclear schools located in indigenous territories.
- Thus, popular participation includes all those involved in the education process, from the local to the national level, with due regard for the different ethnic groups and their cultural and linguistic characteristics.

By way of conclusion

Bolivia's current emphasis on intercultural bilingual education has drawn attention to the need to train human resources and conduct research of various kinds that can provide feedback for pilot projects. At present one of the most serious obstacles to the development of Bolivia's programme of intercultural bilingual education is the lack—common to the countries of Latin America—of sufficient linguists, anthropologists and teachers who speak indigenous languages and can provide bilingual education.

The problem is particularly acute in the field of Guaraní-Spanish education: there are fewer qualified staff than in the Quechua and Aymará languages. Although Bolivia has been able to overcome these obstacles by making use of the experience of neighbouring countries, Peru in particular, the magnitude of existing needs calls for more far-reaching solutions to the problem of training the required number of bilingual education professionals. To that end, the Asamblea del Pueblo Guaraní²⁰ and the NGOs supporting it are currently discussing the possibility of opening a training centre for Guaraní teachers. This will be achieved by modifying the curriculum of at least some of the country's teacher-training institutions so that they specialize in intercultural bilingual education. There is some concern, however, that universities will fail to recognize the importance of training professionals in indigenous languages, anthropology and intercultural bilingual education.

Another challenge is the latent conflict evident in the teaching profession: teachers in rural areas may not be flexible enough to accept the new roles attributed to rural communities and heads of family in the management and development of intercultural bilingual education. While the *Confederación Nacional de Maestros de la Educación Rural de Bolivia* (National Association of Rural School-Teachers of Bolivia) and many teachers in rural areas endorse bilingual education programmes, local teachers may feel that their status in rural areas is threatened by a system that encourages the active participation of communities and heads of households in the management and development of the educational process. It is paradoxical that this

conflict should arise in a context in which most of those concerned speak an indigenous language and, very often, are of the same extraction. The difference lies perhaps in the fact that teachers are the product of the education system they want to change but, consciously or unconsciously, defend, not so much in terms of the ideological foundations of intercultural bilingual education or its content, but more in relation to the management of the system, teaching methods and classroom procedures, even proper teaching practices.

Lastly, this new phase of intercultural bilingual education in Bolivia, the starting point of which has to be the broader coverage called for under the new Education Code and its influence on national education as a whole, is introducing new concepts, opening up new horizons and giving rise to new needs. We refer here to the ideal of two-way bilingualism—the object of more than a decade of struggle. There is evidence that the new Education Code is helping to encourage Spanish-speakers to learn indigenous languages, a necessary stage in the building of a more democratic multi-ethnic society.

Nevertheless, if Bolivian society as a whole wishes to fully guarantee the linguistic and cultural rights of the country's indigenous peoples and if the ideal of treating diversity as a resource is to be attained, Bolivia needs an integrated policy of linguistic standardization that extends to sectors other than education and promotes the permanent development of indigenous languages and cultures. Steps in this direction should be taken now, while the country is going through a period of unprecedented openness to new ideas. Indeed, on the basis of the experience of other countries, it would seem that opportunities such as this are exceptional in the long history of single-minded determination that has characterized linguistic and cultural policy in Latin America. Of course, neither Latin America nor Bolivia is as they once were and it is equally true that those most directly concerned are raising their voices more strongly than ever before. Lastly, if building democracy is the aim, countries like Bolivia cannot afford to ignore the majority—the indigenous population.

Notes

1. We use the term *minoritization* in reference to a social process that has affected all indigenous American peoples, who have been regarded, since the European invasion, as backward communities. Similarly, we refer to such peoples as 'minoritized' and not as 'minorities'—the previous term—since they may in fact be majorities, and are so in at least five countries, in particular Guatemala and Bolivia.
2. The demands made by the Zapatista National Liberation Army, which has kept the Government of Mexico at bay, include 'eradicating illiteracy, building more schools, hiring more and better teachers, *extending bilingualism* and promoting technical training'. In response, the representative of the government pledged, with regard to bilingual education, to 'extend bilingual education to secondary and higher education [...] and to take legal measures such as the inclusion of bilingual education in the General Law on the Rights of Indigenous Communities and in State laws'. In *Proceso* 909 (emphasis added).
3. At present Bolivia has 6.5 million inhabitants, 67% of whom belong to the country's various ethno-linguistic groups. Quechua is the most frequently spoken language, fol-

- lowed by Spanish and Aymará. Next come the ethnic groups of the Chaco, Amazonia and Oriente (known as the multi-ethnic regions because of their diversity) where the majority group is Guaraní (of interest by virtue of the high degree of organization and autonomy it has achieved in the last fifteen years). Some twenty-seven other ethno-cultural groups also live in this region.
4. In the March for Dignity, thousands of indigenous peoples came from the four cardinal points of the country to the seat of government in La Paz to ask the Congress and the President of the Republic, Jaime Paz Zamora, to recognize their authorities that had been elected in accordance with their own laws and customs, and to grant the devolution of their territories, the establishment of bilingual intercultural education and the right to equal participation, among other claims.
 5. As may be imagined, political plans at that time did not include the building of a nation by using one of the country's principal means of communication. It should be recalled that the vast majority of the Bolivian population, including many members of the Creole-Mestizo minority and of long-established families, spoke one of the majority indigenous languages: Quechua, Aymará or, to a lesser extent, Guaraní.
 6. The Bolivian Education Code is the General Education Act, which governs the education system as a whole and its different sectors: teachers, students, parents and unions. Both the unions and the farmers' organizations have espoused the Act, which, over the years, has become a symbol of the whole system. The Educational Reform Act, known as the 'New Educational Reform Code', was adopted in the face of much resistance, especially from teachers.
 7. Cf. Amalia Anaya and L. Enrique López: *Protagonismo del aprendizaje, interculturalidad y participación social: claves para una reforma educativa* [The importance of learning, interculturality and social participation—keys to educational reform], *Revista unitas* (La Paz), no. 11, September 1993, p. 40–51.
 8. The Bilingual Intercultural Education Programme was launched under an agreement between the Ministry of Education and UNICEF, and lasted from 1982 to 1995. In 1995, the Programme became part of the educational reform process that benefited from its experience following longitudinal and transverse evaluation. The Programme received financial support from UNICEF for the preparation of textbooks in Aymará, Quechua and Guaraní, and in-service training for teachers. Some 8,000 pupils from those regions were involved up to the fifth year of primary school.
 9. CSUTCB National Congress, 1991.
 10. The Popular Democratic Union, led by Hernán Siles Suazo, won the 1980 elections but was pushed out by a military *coup d'état*. The Union returned to power in 1982 with the endorsement of all sectors of the population, thus marking the beginning of the building of democracy in Bolivia.
 11. CSUTCB, National Congress, 1991.
 12. *Ibid.*
 13. *Ibid.*
 14. ETARE: *Dinamización Curricular. Lineamientos para una política curricular* [Curriculum development. Guidelines for a curriculum policy], in: *Cuadernos de la reforma* (La Paz), 1993.
 15. To define the skills required by society at national level, a nation-wide survey was conducted in which views were solicited from all those involved in education: children, teachers, managers, parents, local authorities, representatives of teachers' unions, rural and urban workers, farmers and indigenous organizations.

16. The Government of General Hugo Banzer Suárez, which came to power on 6 August 1997, revoked some of these measures, in particular medical coverage for the elderly and old-age benefits.
17. The National Education Secretariat became the Ministry of Education, Culture and Sport in 1997, retaining its reformed functions in the education sector.
18. Decrees regulating the Education Reform Act 1565; Supreme Decree no. 23951 of 1 February 1995.
19. *Organización Territorial de Base* (a local grass-roots organization). Bolivia respects and recognizes the various indigenous peoples' organizations existing in rural and urban areas. In the latter case, they are generally 'heads of household' associations. Among the indigenous peoples, traditional forms of organization and participation in community affairs are recognized. In rural areas, labour unions and other such organizations are recognized. The only requirement is that they must register with the municipality to which they are attached. Decrees regulating the Popular Participation Act 1551, OTB Supreme Decree no. 23858 of 9 September 1994.
20. The *Asamblea del Pueblo Guaraní* (Guaraní People's Assembly) is the highest governing body of the Guaraní people, composed of the chiefs of each of the constituent groups. The Assembly is presided over by a Secretary-General, democratically elected each year by the Guaraní people as a whole.

Bibliography

- Albó, X.; d'Emilio, L. 1990. *Lenguas autóctonas y educación en Bolivia* [Indigenous languages and intercultural bilingual education in Bolivia]. *Prospects* (Paris, UNESCO), vol. 20, no. 3, p. 321–30.
- Amadio, M.; López, L.E. 1993. *La educación bilingüe intercultural en América Latina: una guía bibliográfica* [Intercultural bilingual education in Latin America: a bibliographical guide]. La Paz, CIPCA/UNICEF.
- Amadio, M.; Zúñiga, M. 1989. *La educación intercultural y bilingüe en Bolivia: experiencias y propuestas* [Intercultural and bilingual education in Bolivia: experiences and proposals]. La Paz, MEC/UNICEF.
- Anaya, A.; López, L.E. 1993. *Protagonismo del aprendizaje, interculturalidad y participación social: claves para una reforma educativa* [The importance of learning, interculturality and social participation—keys to educational reform], *Revista unitas* (La Paz), no. 11, p. 40–50.
- Bourdieu, P.; Passeron, C. 1971. *La reproduction* [Reproduction]. Paris, Éditions de Minuit.
- Centro Cultural Jayma. 1993. *Hacia una educación intercultural bilingüe* [Towards intercultural bilingual education]. *Raymi 15* (La Paz), no. 3, p. 31–53.
- Claure, C. 1989. *Confederación Sindical Única de Trabajadores Campesinos de Bolivia (CSUCTB)* [Consolidated Confederation of Rural Workers of Bolivia]. La Paz.
- Congreso Nacional de la Educación. 1992. *Resumen de conclusiones* [Summary of conclusions]. *Diario presencia* (La Paz). 17 June, centre pages.
- D'Emilio, L. 1993. *El pueblo guaraní y su educación* [The Guaraní people and their education]. Revised version of a paper presented at the International Symposium on Bilingualism and Education. Universidad Pedagógica Nacional, Mexico City, April.
- Equipo Técnico de Apoyo a la Reforma Educativa. 1993a. *Dinamización curricular: lineamientos para una política curricular* [A more dynamic curriculum: guidelines for a curriculum policy]. *Cuadernos de la reforma* (La Paz).

- . 1993b. Educación intercultural bilingüe: Seminario taller. Memoria [Intercultural bilingual education: a workshop seminar. Report]. *Cuadernos de la reforma* (La Paz).
- . 1993c. Reforma educativa: propuesta [Educational reform: a proposal]. *Cuadernos de la reforma* (La Paz).
- Government of Bolivia. 1994. Decretos Reglamentarios a la Ley 1551 de Participación Popular [Decrees regulating Popular Participation Act 1551]. *Decreto Supremo no. 23858 de las Organizaciones Territoriales de Base*. La Paz.
- . 1995a. Decretos Reglamentarios a la Ley 1565 de Reforma Educativa [Decrees regulating Education Reform Act 1565]. *Decretos Supremos no. 23950, Organización Curricular*. La Paz.
- . 1995b. Decretos Reglamentarios a la Ley 1565 de Reforma Educativa [Decree regulating Education Reform Act 1565]. *Decretos Supremos no. 23951, Estructura Administrativa*. La Paz, February.
- . 1995c. Decretos Reglamentarios a la Ley 1565 de Reforma Educativa [Decree regulating Education Reform Act 1565]. *Decreto Supremo no. 23949, Organos de Participación*. La Paz, February.
- . 1995d. Ley no. 1565 de Reforma Educativa [Education Reform Act 1565]. *La Gaceta Oficial* (La Paz), July.
- Instituto Lingüístico de Verano. 1975. *Forjando un mundo mejor* [Forging a better world]. La Paz, Ministry of Education and Culture, Instituto Lingüístico de Verano.
- López, L.E. 1994. *La educación intercultural bilingüe en Bolivia: balance y perspectivas* [Intercultural bilingual education in Bolivia: evaluation and prospects]. Paper presented at the 1994 Annual meeting of the Museum of Ethnology and Folklore (MUSEF), La Paz, August.
- . 1995. Educación, pluralidad y tolerancia. Apreciaciones desde la educación indígena latinoamericana [Education, plurality and tolerance. The viewpoint of indigenous education in Latin America]. *Revista unitas* (La Paz), vol. 13/14.
- López, L.E.; d'Emilio, L. 1991. La educación bilingüe mas alla de las fronteras nacionales: la cooperación peruano-boliviana [Bilingual education across national frontiers: Peruvian-Bolivian co-operation]. *Pueblos indígenas y educación* (Quito), vol. 20, p. 93–121.
- Muñoz, H. 1994. Bolivia: apreciación del Proyecto de Educación Intercultural Bilingüe [Regiones Aymará, Quechua and Guaraní] [Bolivia: evaluation of the intercultural bilingual education project in the Aymará, Quechua and Guaraní regions]. *Jornadas lingüísticas* (Mexico City), February.
- UNESCO. 1990. Open File: Intercultural bilingual education in Latin America. *Prospects* (Paris), vol. XX, no. 3.

EDUCATION FOR SUSTAINABLE DEVELOPMENT

THE LITERACY CAMPAIGN

IN RURAL MOROCCO:

DRAWING SOME LESSONS

Mohamed Dardour

Introduction

A national-scale literacy campaign was launched in Morocco at the beginning of the 1990s at the initiative of the public authorities. This campaign was the second of its kind and followed the one carried out in the aftermath of independence (1956–57). The population groups benefiting from this operation included the peasants of the Gharb, a north-western region of Morocco. That group is the focus of this study.

Though the campaign mobilized considerable financial, logistical and human resources and involved a relatively significant number of peasants, it has not yet attracted adequate attention. The analysis of this undertaking is all the more timely as it has undergone no evaluation, notably by its initiators—at least not at the local level (the regional Office of Agricultural Development in the Gharb, henceforth referred to as the Development Office).

Original language: French

Mohamed Dardour (Morocco)

At present responsible for teaching sociology and cultural anthropology at the Institut régional du travail social d'Olivet, Orléans (France). Ph.D. in sociology from the University of Tours (France). Member of the Third World Association. Professional interests concern changes brought about in rural communities by the activities of specialized institutions and the situation of planned acculturation brought about by national or international development projects or policies. Author of numerous published articles.

The timeliness of this analysis also reflects some fundamental questions, namely those concerning the place assigned to the training of rural dwellers in the plan of cultural, social and economic transformations undertaken by the public authorities; the conception that the instigators have of this operation; and the goals that this literacy campaign has set for itself, given that the State is both proclaiming its disengagement and launching initiatives within which the possibility of producer group participation (including, among others, the agricultural co-operatives set up through agrarian reform) is contemplated.

This study has three objectives:

- An area as important and strategic as the teaching of literacy to adult farmers should be analysed from a practical standpoint. The study of this, by way of the Moroccan case, will help shed light on the general issue of rural inhabitants training in Third World countries and the assertion of their initiative.
- The analysis of the reaction of people who are theoretically supposed to benefit from a project that originates in the intervening, and thus exogenous, society will make a sociological contribution.
- It is necessary to account for the way in which the peasants concretely experience the policy of disengagement and, consequently, to emphasize its nature. Through observing the situation of peasants faced with the administrative, institutional and economic environment, by 'allowing' them to speak as well as by listening to them, we can measure the impact of this policy and, in the area of training, define their needs and become acquainted with their plans and expectations.

The value or merit of this literacy campaign resides more in the questions that it raised, notably those relating to the approach and method adopted by the technicians, than in its impact or its results.

In this respect, the examined experience is particularly instructive. It is therefore interesting to study it in practice, that is as socially determined and socially oriented activity, but also and especially in terms of what it indicates about the state of the project (or 'non-project') and the underlying conception, taken as an expression of a rationale or a world-view. It is significant in the context of the initiatives, both underway and planned, in other privileged fields of intervention (irrigation, extension work, producer groups' budget management, creation of agricultural co-operatives), both at the local level (directed, in this case, by the Development Office) and nationally (for details cf. Dardour, 1997).

In spite of the importance and significance of the literacy campaign undertaken by the Development Office among the farmers within its zone of intervention, its impact has proved to be limited.

There are three main causes for this: (a) the operation's inherent features, namely its preparation and the forms of its implementation; (b) its content and design; (c) finally—putting aside their perception of this undertaking—the 'beneficiary's' expectations and their needs as regards literacy, education in general and, consequently, participation or access to autonomy.

The preliminary conditions of the literacy campaign: a risky undertaking

The organization of literacy classes for the farmers in the agricultural co-operatives of the Gharb was undertaken primarily as part of a general project with the official title 'combating illiteracy'.

Following a 1989 speech by the Head of State, in which he raised the issue of adult illiteracy and stressed its importance,² a national commission was created in 1990 and a national programme launched that same year by the public authorities. The undertaking involved nearly 255,000 adults throughout the country.

The Ministry of Agriculture was involved, as were other ministries. It committed itself, for its part, to provide literacy courses to an estimated 10,680 peasants. In the Gharb, this undertaking involved 480 individuals and concerned four groups of farmers living in the modern irrigated areas.

The creation of these groups dates from 1971 and all of them were attached to so-called *Centres de mise en valeur* (CMV—Land Development Centres). Two belonged to CMV 237 in the Sidi Med Lahmar rural commune and the other two to CMV 238 in the Souk Tlate rural commune.

Two co-operative directors were, as literacy officials, responsible for teaching these groups.

This operation was limited to a two-year period and was organized as follows: for the two co-operatives coming under CMV 238, the campaign lasted only four months, from February to June 1990; for the other two co-operatives, the literacy classes lasted for two terms, from March to June 1990 and from November 1990 to April 1991.

Despite the importance of this undertaking, its impact proved to be rather weak. Several factors limited its impact and led to its ultimate failure.

One of the main factors stems from the conditions under which this operation was implemented and launched and consists in the very short period between the announcement of this initiative by the Head of State (at the end of 1989), the setting up of the national commission (January 1990) and the launch or implementation of the campaign (February 1990).

The second factor was the equally short period between the preparation of the trainers (the two directors of the co-operatives in this case) and the beginning of the courses for the farmers. Both took place in the same month (February 1990).

The third main factor is the suspension of the literacy classes. This factor is a matter of form rather than content. The break resulted from two circumstances described below.

THE LOGISTICAL LEVEL

The two co-operative directors responsible for organizing the courses did not receive support from their superiors. The Development Office failed to put a means of transportation at their disposal for the necessary travelling to the co-operative villages.

One of the two had to use his own car and for a time he also had to pay the petrol expenses to cover distances of five to seven kilometres. The other had to rely on the generosity of the peasants themselves for the duration of the course. People who would deliver milk to the commune where the CMV was located (at a distance of seven kilometres) took turns giving him a lift twice weekly on class days.

Moreover, the Development Office was not in a position to provide more than four hours of classes per week, the amount of teaching the funding would cover. It also demanded that the sessions take place outside the hours of duty, i.e. either between noon and 2 p.m. or after 6 p.m.

It became clear that the directors responsible for the literacy course were not able to perform their task, in particular in the evening. One of the obstacles, as we have just seen, was the absence of transport. Unlike, for example, their advisory officer colleagues sharing the same CMV offices, the literacy instructors did not have a car and driver at their disposal for their administrative and teaching duties. Moreover, it is almost impossible to be intellectually and physically fit to teach classes after a full day's work. It was for this reason that the officials wanted the sessions to be made a part of their statutory function and held late in the morning or in the early afternoon.

The other significant difficulty that the literacy officials faced was the absence of teaching aids.

Here again, the Development Office was unable to provide them with the essential documents (books, syllabus) needed for the farmers' training, either before the launching of these classes, during them, or—in some cases—even by the end of the first year.

The suspension of the courses stemmed in part from the absence of these teaching resources, as stressed by one of the literacy officials:

This situation [i.e. the difficulty of keeping the classes going] arises from the lack of possibilities. There was the problem of the working documents. The books and the syllabus were never sent to me. When we went to the Office to ask for the supplies, we were told to wait, to give them some time. We were sent the forms [for the class monitoring] to fill in every fortnight, but we could not fill them in, since we were doing nothing! I therefore informed the hierarchy and the classes were stopped.

The teaching aids in question never reached these two officials. They had to rely on their own resources to provide the literacy classes for the farmers. (We will analyse the impact of this situation on the content of those classes in the second part.)

Consequently, they were left to their own devices. For example, on their own they were supposed to launch this initiative in these four co-operatives while taking all the necessary steps to inform the 300 farmers belonging to them.

To say the least, when the programme was launched, it did not have the official character that would have lent it a certain formality. And it provided proof of the little interest taken by the authorities with regard to this operation and the farmers' training.

The officials of the principal departments directly involved in this project were conspicuous by their absence, both prior to and following its launch. The depart-

ments in question were, in this case, the Department of Agrarian Reform, the Office of Co-operation and the professional organization Extension Department.

One of the literacy officials had to request the help of the local administrative authorities. The farmers were then summoned to meet at his office in order to be informed about the literacy classes. The other official had to do without the help of the authorities and himself ensure the circulation of information about the literacy campaign among his farmers.

It is easy to imagine the psycho-sociological impact that this 'invitation' to the office of the local administrative authorities certainly had on the farmers—the way this situation was probably interpreted and the confusion that certainly resulted from it. Similarly, one can imagine its effect on the state of mind of the literacy officials themselves.

This leads us to another problem with which these officials were confronted. This represented the second aspect of the whole affair that eventually limited the impact of the literacy campaign and led to its abandonment.

DISILLUSIONMENT

The disillusionment of these two literacy officials when confronted with the passive attitude of the hierarchy was all the greater as, initially, the principal departments of the Development Office were closely involved. Indeed, out of six directors responsible for the supervision of the fourteen co-operatives (or 512 farmers) out of nineteen existing in the two irrigation areas studied, the two directors in question were the only ones to come forward as candidates to deliver and undertake this literacy campaign. By doing so, they committed themselves both materially, in terms of giving up their time, and intellectually, by undergoing training at one of the Development Office's Training Centres at Mahdia near Kénitra (at a distance of eighty kilometres from their respective CMVs). One of them even continued to teach literacy classes to farmers one year later (from November 1990 to April 1991), despite the many difficulties we have described.

Thus, the attitude of the officials of the various departments of the Development Office towards an operation that they had directly been involved in setting up had the opposite effect from that being sought—namely, the demotivation of the literacy officials.

Given the attitude of the Development Office staff and the suspension which followed, owing to psychological and material factors, one may well wonder whether the motivation and determination displayed by the two literacy officials when this undertaking began would be the same if their help was requested again—or if an initiative of the same kind with the same object was proposed, or any other project outside their habitual role of administrative supervision of co-operatives.

Given what happened, and following many talks on this subject with these two literacy officials, it appears doubtful that they would show the same enthusiasm and the same goodwill. Moreover, other co-operative directors in other hydraulic sectors of the Development Office's target area who had taken part in this literacy drive

had to abandon their classes a year after their launch for the same reasons, i.e. lack of logistical backing and teaching resources, coupled with absence of active support from the Development Office staff.

Here again, one could ask whether this situation, namely the abandonment of the campaign and thus its failure, might not have more significant, indeed irreversible, effects than the Development Office staff seem to believe. Might it not ultimately threaten other operations (concerning literacy teaching or other objectives as well) being carried out or planned among farmers in the other hydraulic sectors, whether by the Development Office itself, a company, or a national or international development institution?

As to the technical-administrative hierarchy, might the passivity it has shown not incline the literacy officials, whose enthusiasm is already blunted, to withdraw what little confidence they have placed in it until now?

Besides the passivity and the material and logistical failures already brought to light, the suspension and abandonment of the literacy campaign has important links with another basic problem.

Problems of content and method

CAUSES OF THE LIMITED INTEREST IN THE LITERACY CAMPAIGN

As we have seen, the limited impact of the literacy campaign that these two officials organized for the farmers of their respective co-operatives was not due merely to the circumstances of its implementation. There were more fundamental reasons underlying this failure.

There are two significant aspects here: one concerns the approach, in the strict sense of the word, which preceded the launching of this initiative; the other relates to the proposed content and the teaching method adopted.

INAPPROPRIATE APPROACH

In addition to the lack of preparation, and the haste that characterized it, the organization of the literacy programme suffered from two problems.

The first concerns the way this operation was presented by the directors to the farmers. Despite their enthusiasm, the approach of the two literacy officials lacked explanation of the reasons and final goals of the initiative. An undertaking as important as this, intended to give farmers access to reading, writing and arithmetic—in other words, to the basic tools of knowledge and perhaps also of autonomy—was presented as rather an ordinary project: ‘I said to the *fellahs* that I had taken a course [in literacy] and anyone who wanted to read, write and count would be welcome’, explained one of the officials.

The second element concerns the timing of the literacy sessions. As noted above, the times were not decided through any prior consultation with the farmers, but were imposed by the Development Office on both the farmers and the two techni-

cians charged with teaching. In the same way, the time slot during the day was laid down unilaterally. Both weekly sessions began at 11.30 a.m., with one finishing at 1.30 p.m. and the other at 2 p.m. This time corresponds generally to the farmers' return from the fields, in particular from the spring onwards, which meant that they were not necessarily receptive—if not 'intellectually', at least not physically. Problems of concentration consequently arose. It seems that this is one of the reasons for the irregular attendance, and indeed the absenteeism, of a number of farmers.

Beyond these two factors (presentation and unsuitable timetable), the literacy campaign seems to have been severely impeded by another particularly important aspect. This concerns the untimeliness of the campaign.

The classes were organized during a particularly difficult period for their intended beneficiaries, namely the time of the rice harvest in years when it was heavily affected by shortage of water in the main storage dam. This is all the more important in that this crop, imposed by the Development Office, accounts for between 60 and 80% of the overall agricultural income of the farmers.

With the literacy campaign beginning after a practically non-existent agricultural harvest (1989), with the same true the following year, the farmers were clearly in a particularly difficult frame of mind, which influenced the numbers attending the classes and their diligence.

The lowered morale, and resultant intellectual unreceptiveness of the farmers, is one of the fundamental reasons why a number of them dropped out of the course, and hence why it failed, even if they recognized its merit and importance:

We gave up the classes because of this problem. We wanted to learn, of course, but it happened in a period where there was no rice. That meant that we didn't have the heart for it. We were thinking about what to give the children to eat and how to feed them in the days ahead.

The least that can be said is that this situation (absence of irrigation and hence of income) apparently went unnoticed by the technicians and staff at the Development Office. This highlights the lack of preparation that went into these courses and reveals the general approach to the literacy project.

These three factors—lack of explanation, inappropriate and imposed timetable, and untimely nature of the classes—considerably limited the impact of this operation. The third factor seems, in the event, to have struck at the heart of this undertaking. This limitation does not concern only the approach that characterized and influenced this initiative. It applies to another basic problem.

UNSUITABLE CONTENT AND TEACHING METHODS

As stressed above, there was a lack of teaching support for the two directors responsible for providing literacy teaching to the farmers. Consequently, the content of the classes was reduced to basics. The directors were forced to improvise, using their

only back-up acquired during the three-day training session in February 1990, three sheets of paper. They had to devise the syllabus themselves. One of them used the syllabus of his children's primary school.

The result was that the content of this programme, developed on the job, in a hasty and improvised manner, was limited to the identification of the letters of the alphabet and their assimilation.

Consulting the exercise books of some students shows phrases borrowed from the Koran or having to do with the rules of society. In fact, the content offered to the farmers was altogether remote from their practical situations and needs.

Totally missing from the programme were topics like administrative documents and accounts (invoices, account sheets, contracts, order and delivery forms, and so on) or operations linked to agricultural activity (the quality and composition of crop treatments or fertilizer) and the economic and financial management of farms or groups. Thus the programme lacked topics likely to arouse a degree of interest among the farmers belonging to the agricultural co-operatives or to be useful as examples to introduce the learners to the three components of the course, i.e. reading, writing and arithmetic. In other words, they were not given the tools with which to manage and take charge of their own farms and groups, take part in society and become autonomous.

Apart from some references to farming reality of the type 'Ali has ploughed his field with the tractor', most of the classes, in our view, remained divorced from the real, practical interests of the students. A topic as practical, common and important in the eyes of the farmers as, for example, *Al Hissabate* (accounts), or the decoding and learning of technical management terms (economic and accounting nomenclature), was paradoxically non-existent. The content of the course was rather prescriptive, smacking of a 'school' context.

The absence of appropriate content was not the only shortcoming in the literacy campaign. There was a second and just as influential problem with regards to methodology.

Here again, the literacy officials were left to fend for themselves in organizing the knowledge that they were seeking to provide to their students.

The method learned during the three-day training session in February 1990 proved to be both inadequate and inconsistent in the practical context of a specific, not to say unusual, audience: adult, elderly in some cases, a majority illiterate and, in part, having little or no motivation.

We can analyse this situation and the problems it raised through examining the organization of the class sessions. These revolved around three subjects, namely reading, writing and arithmetic. They were conducted simultaneously by the literacy officials.

As for reading, the literacy officials had, from the outset, asked the farmers to use sentences or to reply in sentences couched in a literary style. This posed considerable problems for people who were little used to employing this style and who, for the most part, had never received formal education, whether in a 'modern' or a Koranic school. This situation also posed significant problems for the literacy officials themselves, as one of them explains:

My problem was getting the *fellah* to answer in a literary and grammatical sentence. The *fellahs* couldn't manage to adopt this kind of expression. It was hard for them to reply with a sentence constructed in a literary language. It was difficult for them even to pronounce a sentence of this kind. Even the brightest *fellahs* could not express themselves like that, in classical Arabic.

The same applied to the teaching of writing. The literacy officials placed a priority on the mastery of spelling, which resembled rather a kind of physical breaking in and ran the risk of causing a mental block among the farmers. Although a number of students succeeded by the end of the courses in familiarizing themselves with the alphabet and in physically mastering the instrument and technique of writing (spelling), this was not true of most of them, according to our findings.

In the area of arithmetic, finally, the methodology consisted of learning figures—hundreds, tens and units—and their recording. This was done in the absence of any example based on or relating to the elements of bookkeeping (book, accounting slip, invoice, and so on). Learning took up the whole of the sessions, without any progression to a subsequent phase.

Without any presuppositions concerning the effectiveness of this method, we remarked during many interviews and visits that all the farmers know how to count and seem to understand figures without difficulty. The problem posed then and now for the farmer is that of deciphering the number and its component parts (*dirham* and centime) and of transcribing it. This aspect seems to have escaped the teachers and initiators of this operation.

We note that this problem is not confined to the farmers met in the course of this investigation, but concerns also subsistence workers in other areas.

Guy Belloncle, who has spent several years dealing with the issue of unschooled adults in Africa south of the Sahara, can help us understand the problem. On the basis of much observation and in-field experience, he remarks that 'It is not a matter of teaching adults to count, something that they can already do perfectly well, but of teaching them to progress from oral (and thus mental) arithmetic to written arithmetic.'³

As we have just seen, these different situations undoubtedly present problems for the beneficiaries—a content ill-suited to their needs and their expectations, combined with an inappropriate methodology and teaching approach – but the technical teaching staff were no less affected.

The different interviews we have carried out on this subject with the officials confirm that they found themselves faced with the same problem.

Despite their motivation, considerable efforts, and personal and intellectual investment in dealing with a specific audience, the local teachers were confronted with problems of content and teaching method in their approach to the farmers, most of whom were illiterate. They had to face two difficulties: the first relates, as analysed above, to the non-existence of content, owing to a dearth of teaching aids (syllabus, learning objectives, resources and equipment, and so on); the second concerns the teaching tools. The training that the teachers received proved inadequate when tested on the ground, and indeed unsuited to the purpose of the operation.

Apart from the fact that the training session was too short (three days, which means about twenty hours), it was found to be rather 'theoretical'. Moreover, this single session suffered from teaching method deficiencies, notably in appropriate methods of teaching illiterate adults. The goodwill, enthusiasm and commitment of the local teachers were apparently not strong enough to overcome this difficulty:

They were hard, these classes, all the same. It was not easy for me. The *fellah* has to be taught slowly, you have to repeat the same thing to him several times. It was difficult with elderly *fellahs*, above all. They tire quickly and cannot continue beyond a certain time.

The official goes on to explain the reasons which, in his view, create this difficulty:

We received some training. During this time, we did not receive any training in teaching as such. The teachers only gave us some theoretical notions, which are not enough. They spoke in general terms. They did not approach the subject in relation to the *fellah*. That meant that we worked with the *fellah* on the basis of our own experience and knowledge of him, connecting this, for example, with the teaching method—as if we knew it already.

As it happens, one of the two trainers responsible for the literacy sessions is the head of a primary school and the other is a school inspector.

It might be asked if the difficulties faced by the teachers in purveying knowledge and literacy to the farmers might at least partly be explained by the 'profile' of these two trainers. There may have been a gap between them and the students in the content and the approach adopted on this occasion, in particular since they were required to teach adults, and moreover adults lacking any formal education.

Of note here is the total absence of follow-up and teaching support that should normally be a part of the teaching programme undertaken locally among the co-operative farmers.

Moreover, the Development Office had paradoxically not taken account of this shortcoming in assessing this operation, which lasted for four months for one group of learners and ten months for the other and involved a far from negligible number of farmers.

This literacy campaign has admittedly revealed its own limitations, as we have just seen (inappropriate, indeed non-existent, content and an unsuitable teaching method), but we have noted that it nonetheless had some impact.

1. Numerous illiterate farmers were able, at the end of this stage of learning, to recognize letters of the alphabet and to write them. A co-operative farmer who can now write his name says: 'Thanks to God and thanks to you [addressing his literacy official], I have at least learned to write my name, to sign my name.'
2. Others who regularly attended the classes reached the deciphering stage and learned to recognize the letters making up a sentence, to read them and even to write them.

3. The third important note that emerges from this operation is the enthusiasm that the farmers showed for the literacy course. Indeed, despite their being pre-occupied and demoralized, the financial hardship caused by the absence of a rice harvest for two consecutive years (1989–90), and the subsequent absence of a significant part of the resources making up their income, the farmers, in particular those who regularly attended, showed a degree of interest and personal engagement in taking the classes that surprised the literacy campaign officials:

Among those *fellahs* who attended the classes up to the end, a certain number during the session went to a corner of the room and learned the letters of the alphabet. They always came with something more to the following session: a letter, a word or a sentence that they had learned by their own efforts.

4. The fourth and final note is the astonishing diligence of many farmers. This applies to all the *fellahs* who took responsibility within their respective groups. However, as might be suspected, it was not true of all the farmers in all three co-operatives studied.

Besides the points identified and analysed above (state of mind, problem of content and method, absence of pedagogical and logistical support for the literacy teachers from the Development Office and so on), the limited impact of the literacy campaign on the farmers (as partially evidenced by the drop-out rate) seems to relate primarily to the failure to take into account the students' practical, everyday needs with respect to their farms and their co-operative groups. Those needs include, in particular, physical access (transparency) and intellectual access (participation) to the various administrative and book-keeping documents (bills, account books and so on), and, more generally, mastery of the tools of management.

The following question springs to mind: why did the farmers surveyed, those who regularly attended the literacy classes as well as those who were frequently absent and those who wanted to attend but could not (due to non-availability in their area), desire to undertake this training, to learn to read, write and do arithmetic, to master these tools—in short, to become literate?

This is what we shall now attempt to explain, by examining the reasons that determine their interest and motivations.

The farmers' motivation

THE MAIN FACTORS

Contrary to what both local and central officials believe and despite appearances, the farmers who took the literacy courses were interested. That interest is yet greater today, particularly in a literacy campaign that would enable them to learn reading, writing and arithmetic. There are three reasons for this.

First, the possibility of gaining awareness and knowledge of the various everyday situations they experience or undergo and with which they must cope. As one farmer who regularly attended the literacy sessions put it: 'The classes are good, but it wasn't enough. It's interesting, because you learn, you're alert!'

It is also 'useful' for the accomplishment of everyday tasks on their farms: 'These things like writing and reading can help with work: bills, factory order forms and so on.'

It is, finally, the means of direct access to these different tools and to their manipulation (management), and thus of self-liberation from the weight of administrative supervision, exercised notably by the local technical staff. This is, of course, only possible within numerous objective constraints (reliance on the officials, in this case those in charge of the daily management of the co-operative and its supervision; accessibility and geographical distance; distance from one's office; reliance on its support or that of another for the carrying out of a number of economic or agricultural operations; translation of administrative or bookkeeping documents and so on), but as one farmer puts it:

It is not practical to keep asking the director to explain this or that. He explains, but not everything. Sometimes we ask for explanations from him or somebody else [i.e. CMV technicians], but nobody supplies them, or else he doesn't want to or cannot reply immediately, he takes his time when things are urgent. And anyway, this bothers us. In that case, we don't ask him.

But the interest shown in literacy by the *fellahs* interviewed focused on three areas representing three kinds of effectiveness: sufficient knowledge through direct access to facts and information of direct concern to them, involving both their individual situations and those of the group to which they belonged; mastery of these facts and this information; and their supervision.

Such interest seems aroused principally by the objective situations in which the producers are involved on an everyday basis. They concern three areas or contexts of action: financial, economic and institutional.

LITERACY AND FINANCIAL TRANSACTIONS

One of the essential problems facing the agricultural co-operative producer concerns the impenetrability of accounting. They experience great difficulty when asking the employees of the CRCA bank (*Caisse régionale du Crédit Agricole*—Regional Branch of the Agricultural Bank) about the state of their finances, notably the number of repayments outstanding, or those of the co-operative, and their respective totals, and likewise the rate of interest charged by the bank. Generally, these figures are recorded and updated in documents earmarked for this purpose and kept by the co-operative director at the CMV. (Note at this point that the farmer turns to the relatively distant CRCA, rather than to his CMV director who is closer; this gives an idea of the type of relations which farmers have with their co-operative directors.)

Often the amount given by these employees is approximate, or quite simply overestimated. It seems that this is standard practice and known to the management. One of the directors responsible for the supervision of the nineteen co-operatives in the hydraulic zone studied confirmed this by saying: 'When the *fellah* goes to the CRCA to find out the amount of his debts, they give him an approximate figure. He is never given an exact figure.'

The second factor motivating the farmer to learn reading, writing and arithmetic is the desire to master figures.

Withdrawing his income from the CRCA is a troublesome and laborious business for the farmer, because the amount written on the cheque delivered by the factory, which he hands to the bank clerk, is worded in an inaccessible language, French, and in figures expressed in *dirhams* and centimes.

To verify the amount in question and avoid sometimes unfortunate consequences at the time of withdrawal, the farmer is obliged to turn to somebody else to translate what has been written in *dirhams* and centimes into *rials* (the old monetary unit of reference).

This situation is often complicated and tricky and presents a worry to the farmers. One of them explains:

It is a problem for me. When I go to the *Crédit agricole* to draw my wages, the cheque and the calculation [i.e. the amount] are written in French. I do not know what is written. So, I am obliged to ask someone that I know is honest to translate the sum into *rials* and write it down in big figures. I have to do this every time.

After that, I go home and I write the figure in *rials* on the palm of my hand so I am not cheated! They do the calculation in French and the *fellah* understands nothing. It is because of all these things that I want to learn to read and write and to count, too.

As will be seen, besides the difficulty resulting from lack of access to the different figures or accounting information, the situation makes the farmer feel a certain distrust towards the CRCA, because of the behaviour of some of its employees.

However, this question does not concern only the relations between the *fellah* and the financial institution with which he must deal. It also concerns his relationship with the local economy.

LITERACY AND THE LOCAL ECONOMY

The second main reason stimulating the farmer's interest is related to the inaccessible character of the documents and figures drawn up by the agro-industrial services (also owing to the language in which they are written—French—and to their content).

All the services and operations (labour, seeds, processing and fertilizing products, loading and delivery and so on) provided by the factory are carried out on credit, under the agricultural policy.

The deductions are then made at source, as are other means of production provided by other sources, such as the rental of irrigation water by the Development

Office, or deductions linked directly to production, such as those made for humidity, impurities, drying sheds for rice, sugar content for sugar cane, and so on.

The density and variety of these items, recorded on the bill or document in a language unknown to the producer-customers, make their use extremely difficult, not to say totally impossible. This is one of the essential concerns of the producers, as they themselves put it:

The *fellah* does not understand these things. He does not know what the figures mean or whether the documents are for seeds or tonnage, for bills or orders. The *fellah* does not want things that he does not understand. It is for this reason that all this should be written in Arabic. It is for this reason also that the *fellah* wants to learn, to know the price of each product, the amount of each item.

Another adds:

So that I know what I am doing and what I can do. The factory people make their own calculations. They confuse us: there are so many figures and you don't know what it's about, you are conned!

I don't know what is written [in the bills] and what they deduct. I have the bill in my hand. I look at it. I see what is written in French. I know that it concerns irrigation water consumption, impurities, tonnage, advances on labour and so on. There are so many figures! But to know exactly all that, and what is left over—I can't do it!

The farmer-producer is all the more attentive and interested in gaining access to and command of the three skills—reading, writing and arithmetic—as the process of marketing, i.e. the whole chain of operations from the acquisition of production factors up to the delivery of the harvest, is altogether beyond him. Moreover, there is lack of transparency in the behaviour of the agents of the various departments of the factory with which farmers deal with respect to delivery, receipts, weighing, determination of the rates of impurity, humidity and sugar content and invoicing of the different payments, including the fines paid for excessive use of the quantities of irrigation water laid down by the Development Office and other taxes.

The unreceptive attitude shown by these departments towards the expectations and demands of the producers to be kept informed of the way these different operations (technical, logistical, commercial and financial transactions) are carried out and about the various deductions made at source and paid to other providers (the Development Office, the union, the association of producers, the National Cereals Office and so on) reinforces the producers' conviction that the local economy and its agents stand to gain something from this arrangement. This is particularly true since the State, through the Irrigation Office and the Development Office, at the request of the eight other national offices, has withdrawn in the last few years from most of the service provision that it used to fulfil by contract (Code of Agricultural Investments of 29 July 1969).

But the interest shown by the farmers in acquiring proper training is motivated by a third consideration, every bit as significant in their eyes.

LITERACY AND THE INSTITUTIONAL AND TECHNICAL ENVIRONMENT

We have seen that the farmer's desire to become literate is motivated by the need to escape from the burden that is part of the everyday activity of the local technical staff responsible for the management and administration of the farmers and the co-operatives. Farmers want to free themselves from supervision by or dependence on these staff, or at least to lighten this burden. But the desire to become literate seems determined not only by the possibility of understanding the figures about the management of the accounts of the group to which they belong, but also by the desire to have the competency to oversee the essential operations carried out by the officials. This is one of the significant aspects to emerge from observations on the ground, made over several years, and from interviews with the farmers:

We want reading and writing classes. We are ready to learn *Al Hissabate* [i.e. accounting], because the director can do what he likes without our being in a position to know what it is all about and what is left over exactly.

Paradoxically, this attitude, this need for transparency, is not aimed exclusively at the local officials, even if they seem to be the principal concern. There are other responsibilities perceived as sufficiently important by the farmers to arouse lively interest on their part, as may be seen from the words of those who have never, for various reasons, assumed responsibility within the co-operative:

When we all meet together [at the annual general meeting], they [i.e. director, board of directors, auditors, office staff] tell us what they have spent [i.e. expenses] during the year, but do not go into the details! That's why we want to learn and get some training in arithmetic, so as to know exactly what the director has spent—to understand certain calculations like those of the co-operative, for example its income and expenditure.

Certainly, the involvement of the farmer in the life of the group to which he belongs—in short, his active participation in its running—appears to be dependent on his instrumental capacity (mastery of reading, writing and arithmetic). But this latter is also determined quite considerably, perhaps fundamentally, by the degree of transparency allowed or not allowed by the group's style of management and by the various financial and economic activities carried out by the group officials. As one farmer put it:

If we knew how to read, write and count, things would not happen as they do. We should spend what time was necessary with the director reading the document so as to understand what he asks us to sign. We should check every time, since we should have direct access to the documents. For example, the *fellah* is asked to sign some minutes. He signs without knowing what they say and without having read them!

Hence the recurrent popular saying among the *fellahs* concerning this obstacle, which reflects a sort of generalized blunting of the faculties: '*Sommoune, boukmoune, layaqchioune!*', which can be literally translated as 'deaf, dumb and blind'. In the

situation they face, this refers to the inability to understand, to grasp the meaning and essence of the things peculiar to the technician, to speak the same language and use the same vocabulary—in short, to the absence of transparency.

Conclusion

The evidence supports the conclusion that the literacy classes organized by the technicians on the initiative of the officials of the Development Office met with only a lukewarm response from the farmers for whom they were intended. The limited impact of this initiative is mainly due to a combination of four sets of circumstances:

1. Inappropriate, not to say non-existent, content, and a teaching methodology ill-suited to an adult and largely illiterate audience.
2. Lack of preparation of the literacy officials to carry out a novel initiative of a kind never before undertaken in this sector among the farmers; the same lack of preparation also applied to the managerial staff in general.
3. Failure to take account, and the absence from the training project, of the real expectations and needs of the target audience, notably in the area of book-keeping management, as much in regard to the running of their own farms as in regard to the concerns of their respective groups. This indispensable aspect is of primary importance, given the relationship that the farmer-producers necessarily enter into on an everyday basis with an inaccessible and complex institutional, financial and economic environment, and this holds from all points of view (given its style of operating which is inherent to it). It seems to have been neglected, not to say totally ignored.
4. The top-down fashion in which the literacy campaign was designed—an expression of a particular social approach—leading to the inability to identify the training project and its final goal, both for the farmers theoretically benefiting from it and for the technicians who were responsible for carrying it out.

What should or could have been a catalyst of participation and social motivation (for the farmers and for the local technicians) was perceived as a banal operation, without much significance—an administrative procedure at best.

The limited impact of the literacy campaign is largely due to its failure to take proper account of the needs of the farmers and their expectations as regards the budget management of their respective groups, and the transparency of operations generally.

In the light of the situation observed on the ground, one can wonder whether the promoters of this undertaking really knew the needs of the people that they had supervised for several years. Indeed, this situation has brought out the inadequate preparation of the technicians and above all their absence of training in teaching literacy to rural dwellers. More generally, it highlighted the flaws in the method of putting across knowledge to adults who have not received formal education.

All the evidence indicates that the initiators failed to grasp the opportunity that this initiative represented, both for themselves and for the farmers, and so missed the far-reaching importance of this operation, which should have been one of trans-

formation and social and economic modernization. An undertaking as essential as it was strategic could have laid the foundations for long-term action, reconciling the economic demands with the farmer's social demands, while taking into consideration the present economic situation and the general outlook. This is all the more important in that this study has revealed a need in the area of literacy and more generally in the area of training and management of the accounts of farms and agricultural co-operatives.

Here, two principal needs are apparent:

- Literacy classes should be based to a greater extent on real situations and factual elements: in this case, on accounts management documents, with the aim of bringing farmers closer to 'functional literacy'.
- The tools of accounting and administrative documents should be translated into the mother tongue of those concerned, using an accessible, simplified vocabulary.

Thus, the failure of this operation has had, at least, the merit of bringing to light the limitations of the approach adopted, its unsuitability in relation to the target population and the absence of methodology. Moreover, it reveals the overall approach to this undertaking.

Apart from the indeterminate nature of the objective or objectives, it is obvious that from the outset this undertaking was not planned with a view to peasant participation, intending the transfer of responsibility to the producers organized into groups and, ultimately, their autonomy. Hence, the peasant participation to which the technical descriptions refer seems devoid of substance and more like a mere empty slogan—just words.

We are therefore likely to see this issue become particularly important and acute in the coming years, both for Morocco and for other non-industrial countries, in view of the major trend towards economic liberalization and budgetary restrictions.

Can the integration into civil society of the rural world, as producer and above all as actor, be achieved without any commitment to the training of its members?

Is it wise to contemplate and embark on economic development while economizing on training and the control of information, which will be the key issues of the next century?

Can this challenge still be met by a twofold investment, social and intellectual?

The future, undoubtedly, will give us the answers to these questions.

Notes

1. This article is an adapted version of an extract from my doctoral thesis in sociology submitted to the University of Tours with the title: *Agriculteurs et techniciens face aux aménagements hydro-agricoles. Contribution à l'étude socio-anthropologique d'un conflit de rationalité. Les groupements de bénéficiaires de la réforme agraire et l'Office du*

- développement du Gharb (1960–1995)* [Farmers and technicians facing hydro-agricultural development. A contribution to the socio-anthropological study of a conflict of rationality. The groups benefiting from agrarian reform and the Gharb Development Office (1960–1995)]. Tours, France, Université de Tours, 1997, 1,200 p.
2. In 1988, the rural population of Morocco totalled 54.7%; cf. *Encyclopedia Universalis—Les enjeux* [The issues], 1991, p. 332. According to the 1982 census, the illiteracy ratio was 82% in the rural areas, 61% for men and 95% for women. According to the national projections, the proportion of the illiterate population over the age of 10 years would reach 11,000,000 in 1990 and 12,000,000 between 1995 and 2000; it will be 13,000,000 in 2005, out of a total population expected to have reached approximately 27,000,000 by that date. Cf. *Journées de formation des formateurs* [Instructors' training week].
 3. *Participation paysanne et aménagements hydro-agricoles. Les leçons de cinq expériences africaines* [Peasant participation and irrigation development areas. The lessons of five African experiments]. Paris, Ed. Karthala, 1985, chap. III, p. 126. See also by the same author: *Anthropologie appliquée et développement associatif: Trente années d'expérimentation sociale en Afrique sahélienne (1960–1990)* [Applied anthropology and community development: thirty years of social experiments in Sahelian Africa (1960–1990)]. Paris, L'Harmattan, 1993, 186 p.

To place your subscription to
PROSPECTS:
the quarterly review of comparative education

Complete the order form below and send it by fax or post to:

Jean De Lannoy, UNESCO Subscriptions Service, Avenue du Roi, 202, 1190 Brussels, Belgium.

Tel.: (32) 2-538.43.08; Fax: (32) 2-538.08.41. E-mail: jean.de.lannoy@infoboard.be

Internet: <http://www.jean-de-lannoy.be>

YES, I would like to subscribe to *Prospects*, UNESCO's quarterly review of comparative education.

Language edition:

☐ English edition

☐ French edition

☐ Spanish edition

Annual subscription rates:

☐ Individuals or institutions in developed countries, **180 French francs** (single issue: 60FF)

☐ Individuals or institutions in developing countries, **90 French francs** (single issue: 30FF)

I enclose payment in the form of:

☐ a cheque in French francs, drawn on a bank with branches in France, made out to 'DE LANNOY—UNESCO Subscriptions'

☐ Visa/Eurocard/Mastercard/Diners/American Express credit card:

No.: Expiry date:

☐ UNESCO coupons

Name:

.....

Address:

.....

.....

(Please type or print clearly)

Signature: Date:

Further information and enquiries about other language versions of *Prospects*:

International Bureau of Education, PUB, P.O. Box 199, 1211 Geneva 20, Switzerland.

E-mail: j.fox@ibe.unesco.org; Internet: <http://www.ibe.unesco.org>

Further information on UNESCO publications from: UNESCO Publishing, 1, rue Miollis, 75732 Paris Cedex 15, France. Tel.: (33) 1-45.68.10.00; Fax: (33) 1-45.68.57.41;

Internet: <http://www.unesco.org/publishing>

The
international
quarterly review
of comparative education

P R O S P E C T S

***PROSPECTS* is edited by the International Bureau of Education.**

The contents pages of *Prospects* can be viewed on the Internet at:

<http://www.ibe.unesco.org/Publications>

'Open files' for *PROSPECTS* in 2000—Volume XXX:

- No. 1, March 2000: *Education for sustainable development and Education for all*
- No. 2, June 2000: *Professionalism in teaching*
- No. 3, September 2000: *Education in Asia*
- No. 4, December 2000: *Educational innovation in the South*

Annual subscription rates:

- ☐ Individuals or institutions in developed countries, 180 French francs (single issue: 60FF)
- ☐ Individuals or institutions in developing countries, 90 French francs (single issue: 30FF)

All correspondence on subscriptions to *PROSPECTS* should be addressed by fax or post to: Jean De Lannoy, UNESCO Subscription Service, Avenue du Roi, 202, 1190 Brussels, Belgium.

Tel.: (32) 2-538.43.08; Fax: (32) 2-538.08.41.

E-mail: jean.de.lannoy@infoboard.be Internet: <http://www.jean-de-lannoy.be>

Further information and enquiries about other language versions of *Prospects*: PUB, IBE, P.O. Box 199, 1211 Geneva 20, Switzerland. E-mail: j.fox@ibe.unesco.org

PROSPECTS CORRESPONDENTS

ARGENTINA

Mr Daniel Filmus

Latin American Faculty of Social Sciences
(FLACSO)

AUSTRALIA

Professor Phillip Hughes

Australian National University, Canberra

AUSTRALIA

Dr Phillip Jones

University of Sydney

BELGIUM

Professor Gilbert De Landsheere

University of Liège

BOLIVIA

Mr Luis Enrique López

Programa de Formación en Educación
Intercultural Bilingüe para la Región
Andina, Cochabamba

BOTSWANA

Ms Lydia Nyati-Ramahobo

University of Botswana

BRAZIL

Mr Jorge Werthein

UNESCO Brasilia Office

CENTRAL AFRICAN REPUBLIC

Mr Abel Koulaninga

Secretary-General of the Central African
National Commission for UNESCO

CHILE

Mr Ernesto Schiefelbein

Universidad Santo Tomás

CHINA

Dr Zhou Nanzhao

China National Institute for Educational
Research

COLOMBIA

Mr Rodrigo Parra Sandoval

Fundación FES

COSTA RICA

Mrs Yolanda Rojas

University of Costa Rica

EGYPT

Professor Dr Abdel-Fattah Galal

Institute of Educational Research and
Studies, Cairo University

FRANCE

Mr Gérard Wormser

Centre national de documentation
pédagogique

GERMANY

Professor Wolfgang Mitter

Deutsches Institut für internationale
pädagogische Forschung

HUNGARY

Dr Tamas Kozma

Hungarian Institute for Educational Research

JAPAN

Professor Akihiro Chiba

International Christian University

MALTA

Dr Ronald Sultana

Faculty of Education, University of Malta

MEXICO

Dr María de Ibarrola

Patronato del Sindicato Nacional de
Trabajadores de la Educación para la
Cultura del Maestro Mexicano A.C.

POLAND

Professor Andrzej Janowski

Polish Commission for UNESCO

SPAIN

Mr Alejandro Tiana Ferrer

Faculty of Education, University of Madrid

SWEDEN

Professor Torsten Husén

Stockholm University

SWITZERLAND

Mr Michel Carton

Graduate Institute of Development Studies

THAILAND

Mr Vichai Tunsiri

Standing Committee on Education,
House of Representatives

UNITED STATES OF AMERICA

Mr Wadi Haddad

Knowledge Enterprise Inc.

VIEWPOINTS/CONTROVERSIES

The culture of peace: a programme of action

*Federico Mayor
and David Adams*

Peace education in a divided society:

creating a culture of peace in Northern Ireland

Terence Duffy

OPEN FILE: EDUCATION FOR SUSTAINABLE DEVELOPMENT

Education for sustainable development:

a local and international challenge

Gustavo López-Ospina

Towards education for a sustainable future

in Asia and in the Pacific

*John Fien,
Osamu Obe and Bishnu Bhandari*

Educational reform and sustainable development
in the Americas

Beatrice Edwards

Educating for a sustainable future: Africa in action

Nathalie Barboza

Managing European learning processes
towards sustainable development

Frits Hesselink

OPEN FILE: EDUCATION FOR ALL

Ten years after Jomtien

Svein Osttveit

Education, culture and indigenous rights:

the case of educational reform in Bolivia

*Sonia Comboni Salinas and
José Manuel Juárez Núñez*

The literacy campaign in rural Morocco:

drawing some lessons

Mohamed Dardour

ISSN 0033-1538

Vol. XXX, no. 1, March 2000