

## DOCUMENT RESUME

ED 458 720

EA 031 439

AUTHOR Gregorio, Lucille C., Ed.; Byron, Isabel, Ed.  
TITLE Capacity-Building for Curriculum Specialists in East and South-East Asia. Final Report of the Training Seminar (Bangkok, Thailand, December 12-16, 2000).  
INSTITUTION International Bureau of Education, Paris (France).  
PUB DATE 2000-12-00  
NOTE 51p.; With funding support from Japanese Funds-in-Trust.  
AVAILABLE FROM UNESCO Publishing, Promotion and Sales Division, 1 rue Miollis, 75732 Paris Cedex 15, France. Web site: <http://www.unesco.org>.  
PUB TYPE Collected Works - Proceedings (021)  
EDRS PRICE MF01/PC03 Plus Postage.  
DESCRIPTORS \*Curriculum Development; Elementary Secondary Education; Foreign Countries; Political Influences; Social Influences  
IDENTIFIERS Cambodia; China; Indonesia; Japan; Laos; Malaysia; Mongolia; Philippines; \*Reform Efforts; South Korea; Thailand; Vietnam

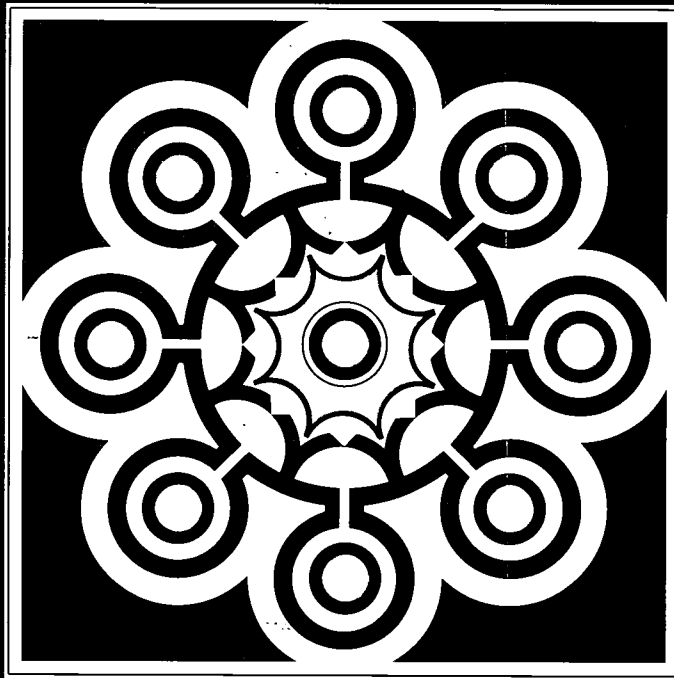
## ABSTRACT

This report presents topics addressed at the December 2000 seminar on Capacity-Building for Curriculum Specialists from East and South-East Asia. Part 1, "Rethinking the Framework and the Capacities Needed for Curriculum Reform," gives some perspectives on trends and issues in curriculum change for the 21st century, both internationally and within South-East Asia. The inadequacy for contemporary societal needs of the traditional education systems developed in the 19th century are described. Part 2, "Strengthening Capacities for Curriculum Reform," looks at some practical means of improving the curriculum development and reform process. The "Curriculum Innovations in Basic Education: Preparing the Learners To Meet the Challenges of the New Millennium" project is described. Part 3, "Curriculum Changes and Reform in East and South-East Asia," focuses directly on the region in question. Socioeconomic and political issues with implications for curriculum change in Asia and the rest of the world are examined. Annex 1 gives a list of seminar participants and resource persons, and Annex 2 is an informational note about a subregional seminar on capacity building in fundamental skills for effective curriculum development and reform held in Bangkok, Thailand, December 12-16, 2001. (RT)

# CAPACITY-BUILDING FOR CURRICULUM SPECIALISTS IN EAST AND SOUTH-EAST ASIA

FINAL REPORT OF THE TRAINING SEMINAR HOSTED BY THE MINISTRY OF EDUCATION, THAILAND

*Bangkok, Thailand, 12-16 December 2000*



PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

E. Nacereddine

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

1

U.S. DEPARTMENT OF EDUCATION  
Office of Educational Research and Improvement  
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

- This document has been reproduced as received from the person or organization originating it.
- Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.



INTERNATIONAL BUREAU OF EDUCATION (IBE)  
UNESCO PRINCIPAL REGIONAL OFFICE FOR ASIA AND THE PACIFIC  
With funding support from Japanese Funds-in-Trust

# CAPACITY-BUILDING FOR CURRICULUM SPECIALISTS IN EAST AND SOUTH-EAST ASIA

FINAL REPORT OF THE TRAINING SEMINAR  
BANGKOK, THAILAND  
12-16 DECEMBER 2000

*Edited by Lucille C. Gregorio  
and Isabel Byron*



Hosted by the Thai Ministry of Education  
in collaboration with the



International Bureau of Education (IBE) and the  
UNESCO Principal Regional Office for Asia and the Pacific (PROAP)

With funding support from Japanese Funds-in-Trust

# Contents

Foreword, by *Cecilia Braslavsky, Director of the IBE, page 3*

## **PART ONE: Rethinking the framework and the capacities needed for curriculum reform**

- The education system of the nineteenth century: the direction, trends and tensions of curriculum reforms in the twenty-first century, by *Cecilia Braslavsky, page 6*
- A reflection on ‘learning to learn’: the four pillars of learning and their implications for curriculum reforms, by *Zhou Nanzhao, page 11*
- Capacity-building for curriculum reforms: a South-East Asian perspective, by *Tan Khun, page 15*

## **PART TWO: Strengthening capacities for curriculum reform**

- Analyzing existing curriculum frameworks for change, by *Lucille C. Gregorio, page 18*
- The role of information and knowledge in curriculum development, by *Isabel Byron, page 21*
- Role of communication within the framework of curricular reform, by *Liliana Jabif, page 26*
- Networking for curriculum development and renewal, by *Isabel Byron, page 32*

## **PART THREE: Curriculum changes and reforms in East and South-East Asia**

- The social context of curricular changes and reforms, by *Virginia A. Miralao, page 36*
- Synthesis of country reports and general trends and needs, by *Virginia A. Miralao and Lucille C. Gregorio, page 38*

## **ANNEXES**

- I. List of participants and resource persons, *page 44*
- II. Information note, *page 47*

# Foreword

*Cecilia Braslavsky, Director of the IBE*

In December 2000, the International Bureau of Education (IBE), in partnership with the UNESCO Principal Regional Office for Asia and the Pacific (PROAP) and the Thai Ministry of Education, organized a seminar on Capacity-Building for Curriculum Specialists from East and South-East Asia, in Bangkok. Participating countries included: Cambodia, China, Indonesia, Japan, Laos, Malaysia, Mongolia, Philippines, Republic of Korea, Thailand and Viet Nam. This was the third meeting on curriculum development issues which the IBE has held in Asia, the first two taking place respectively in New Delhi in March 1999 and Beijing in March 2000.<sup>1</sup> These seminars are principal components of the IBE's programme of capacity-building for curriculum development and renewal in all Member States. The Bangkok seminar was organized as a follow-up activity to the outcomes of the New Delhi meeting, at which the possibilities of developing an Asian Network for the Management of Curriculum Change had been discussed, and proposals put forward for such an eventual undertaking. While, to date, there has been no official launching of such a network, the Bangkok seminar was intended to build on some of the concerns and suggestions coming out of the New Delhi seminar, while introducing the new training approach of the IBE which will focus on the strengthening of professional competencies for more effective curriculum development. This approach was piloted through a component on communications skills for curriculum specialists.

The objectives sought by the IBE were complemented by those of PROAP, which had just launched a project entitled: Curriculum Innovations in Basic Education: Preparing the Learners to meet the Challenges of the New Millennium. This project, funded by Japanese-Funds-in-Trust, initially targeted six Asian countries, namely, China, Japan, Philippines, the Republic of Korea, Thailand and Viet Nam. With the collaboration of the IBE, it was possible for the other participating countries to be included in some aspects of the project. The broad goal is to 'provide some assessment of the quality of learning at the basic level and the effectiveness of this in preparing learners for the challenge of the twenty-first century, with lifelong learning as the ultimate goal. Considerations would be based [...] on the

Four Pillars of Learning advocated by the International Commission on Education for the Twenty-First Century'.<sup>2</sup> The project has a number of objectives, which include a critical analysis of the curriculum development/reform process in the participant countries using prescribed guidelines, and the formulation of a regional framework for curriculum development and renewal based on the four pillars of learning.

Thus, as part of on-going collaboration between IBE and UNESCO-PROAP, it was agreed to merge the two institutions' similar interests in capacity-building for curriculum development, through jointly organizing this seminar, assisted by the very generous hosting of the event by the Ministry of Education of Thailand.

In preparation for the seminar, delegates were asked to prepare reports on their countries' curriculum development processes and trends. A reading of these reports showed a number of similar concerns within the region, despite the great diversity in economic development, cultures and political systems. The search for improved quality and relevance of school curricula is an overall preoccupation, manifested by a range of reform efforts. Expressed needs include: a more integrated curriculum with reduced content, improved teacher education for the effective implementation of reform, greater involvement of parents and the wider community in the educational process, and an improved balance between academic and practical elements of the curriculum.

As a key aspect of the proceedings, a specialist from the Asia Pacific Social Science Research Council (ASSREC) presented criteria for a situation analysis of the national curriculum for basic education and a proposed new framework for revising and updating the existing curriculum. These were discussed, modified and approved by the participants. As a follow-up to the seminar and continuation of the project, an in-depth study is being undertaken of the process of curriculum reform in the countries of the region. It is also hoped that the proposed framework will serve to direct/inform future curriculum development and change in East and South-East Asia.

The report is divided into three sections. Part One, entitled 'Rethinking the framework and the capacities needed for curriculum reform', gives some perspectives on trends and issues in curriculum change for the twen-

ty-first century, both internationally and within South-East Asia. Cecilia Braslavsky, Director of the IBE, describes the inadequacy for contemporary societal needs of the traditional education systems developed in the nineteenth century, which are still largely followed in much of the world. She identifies key trends in contemporary society and corresponding societal needs which make new, urgent demands on education, looking at some of the risks and tensions these imply for the educational process, and referring to some current efforts at reform. Zhou Nanzhao, Acting Director of the UNESCO Principal Office for Asia and the Pacific, outlines further the challenges for education in today's world, applying this both to the global and Asian contexts, recommending the 'Four pillars of learning' described in the Delors Report as the basis for curriculum reform and renewal.<sup>3</sup> Tan Khun, Director of the Southeast Asian Ministers of Education Organization Regional Centre for Education in Science and Mathematics (SEAMEO-RECSAM) provides a brief overview of SEAMEO and of its role in curriculum reform in the sub-region.

Part Two, 'Strengthening capacities for curriculum reform', looks at some specific practical means of improving the curriculum development and reform process. Lucille Gregorio gives a summary of the recently launched PROAP project, 'Curriculum Innovations in Basic Education: Preparing the Learners to Meet the Challenges of the New Millennium'. This is followed with chapters by Isabel Byron and Liliana Jabif on the

roles of information, communication skills and networking in improving the process of curriculum reform.

Part Three, 'Curriculum changes and reform in East and Southeast Asia', focuses directly on the region in question. Virginia Miralao looks briefly at the socio-economic and political issues which have implications for curriculum change in Asia and the rest of the world, followed by a synthesis of the country reports presented to the seminar on curriculum development processes, trends and needs in the participating countries.

#### Notes

1. See: (a) International Bureau of Education; India, Ministry of Human Resource Development, *Globalization and living together: the challenges for educational content in Asia*, Geneva, IBE, 2000. (Final report of the sub-regional course on curriculum development, New Delhi, March 1999); (b) International Bureau of Education; The Chinese National Commission for UNESCO, *Science education for contemporary society: problems, issues and dilemmas*, Geneva, IBE, 2001. (Final Report of the International Workshop on the Reform in the Teaching of Science and Technology at Primary and Secondary Level in Asia: Comparative References to Europe, Beijing, March 2000.)
2. UNESCO Principal Regional Office for Asia and the Pacific, Project proposal for extra-budgetary funding, Bangkok, 2000, p. 4.
3. Jacques Delors, et al., *Learning: the treasure within*, Paris, UNESCO, 1996.

# PART ONE:

## RETHINKING THE FRAMEWORK AND THE CAPACITIES NEEDED FOR CURRICULUM REFORM

# The education system of the nineteenth century: the direction, trends and tensions of curriculum reforms in the twenty-first century

*Cecilia Braslavsky*

## I. SOME MAJOR TRENDS OF SOCIAL DEVELOPMENT AND THE NEED TO REVIEW EDUCATION

The need for curriculum change is based on the recognition that there has been a consolidation of a number of trends that began at least twenty years ago. These trends relate to the demand for education, to the components and resources of educational processes and to the current provision of educational services.

There are at least six noticeable trends in the demand for education: (i) the changes in occupational profiles in the context of a world of work that is increasingly heterogeneous, in many cases shrinking, swiftly changing and ever more globalized; (ii) the need to counteract deepening social inequalities and increasing marginalization and violence; (iii) the need to recognize that the diversity between individuals and communities is a valuable resource that is different from social inequality; (iv) the need to educate individuals so that they are able to satisfy their need for better forms of representation as citizens in society; (v) the increasingly broader spectrum of issues arising, for example, from advances in biotechnology on which individuals may take decisions; and (vi) the co-existence of advantages and disadvantages resulting from the impact of technical progress on the environment and the quality of life of individuals and communities.

These trends bring different opportunities and new risks for education and education systems. The existing education system was invented to cope with a society organized in classes but giving at the same time opportunities for the majority to be integrated. It was improved to cope with an economy organized in sectors and seeking for specialization. In that economy, society expected that some people learned to think and to take decisions and some others to act without thinking. Especially the non-specialized working positions could be occupied by skilled trained workers having less general knowledge and capacities for lifelong learning.

The current situation makes it necessary to learn both: to act and to think. People who have not been educated in this sense are probably not able to maintain good jobs, or invent new ones, and even to have some possibilities to direct their lives. The speed of economic and social changes makes it also necessary to learn to

tackle the stress of constant changes, for one to take advantage of the changes.

It is also necessary in this current situation to strengthen the teaching of values that could be understood and internalized. The attempts to react against marginalization using violence would not solve the problems, and more than that, the unequal and haphazard distribution of opportunities are threats to the survival of humankind.

With regard to the components of the educational processes, there are also at least four important trends to be considered: (i) the constant restructuring and the acceleration of scientific and technological knowledge, and the emergence of an authentic scientific and technological system that is rapidly making educational contents obsolete based on the provision of information; (ii) the growth of milieus outside the school for cultural creation and consumption by children and young people; (iii) the ever-widening use of the new information and communication technologies; (iv) the decline in the effectiveness of the teaching and school models developed in the previous centuries.

Special attention has to be paid to the first of those four trends in the framework of the need to shift the educational paradigm in relation to one of the basic educational principles. Education was supposed 'to transmit the culture of adult generations to younger generations'. Behind this principle is a hypothesis of stability and homogeneity that is not later acceptable. This hypothesis of stability involves generations—every generation and every culture. During the past centuries it was assumed that the young generation did not have a culture of its own and would accept willingly what was imposed by adults, that young people form an homogeneous group, where the only differences were biological or attributable to social class and that adult culture, and the way in which knowledge was produced and structured was stable over time.

The speed of current changes led to a rediscovery that each generation possesses its own culture, that there is wide diversity within each generation and that the way in which knowledge is produced and structured changes in relation to changing times. These rediscoveries and the evolution of educational psychology lead to the acceptance that children and young people have to be active participants in the educational processes and that even the diversity has to be encouraged. The



increasing evidences about the instability of knowledge added elements to face the challenges of 'learning to learn'.

As a result of the concurrent actions of these trends, there is a growing contradiction between progress in incorporating individuals into formal education and the deficiencies in its quality, understood as its capacity to respond to new educational demands. Some of the above mentioned trends—for example, the demand for new profiles for economic, social and political participation, greater recognition of diversity, and the new dynamics of knowledge production—are posing renewed challenges to the meaning of education. In any case, this issue concerns the content of education, defined in the broadest sense of the term. The content of education is, in fact, all that should be taught or which is effectively 'contained' in educational practices: values, concepts and processes for learning, being, doing and living together.

The contradictions between quantitative advances and problems in the quality of education, the increasing use of the new information and communication technologies (ICTs), the growing demand from children and young people to learn actively and creatively, and a deeper understanding of the importance of links with communities so that education may be of better quality and more effective, also present new challenges to the issue of teaching methods and school management.

Increasing interconnections and the globalization of many economic decisions and processes, intensified migration, and the international scale of many communication media provide populations with new standards and parameters. There are attempts to counterbalance these through local and national production, and they also provoke resistance. This context produces tensions reflecting different attempts at achieving membership and constructing identities. These tensions make demands on education in terms of acquiring skills to facilitate their peaceful, creative resolution.

The new scenario at the beginning of the twenty-first century thus provides more opportunities and more risks for each and every individual to have access to a living wage, for the redistribution of the benefits of economic growth, for social cohesion, democracy and cultural diversity. It also provides more opportunities and risks for peace at the international, regional and local levels.

Education can be a powerful tool for exploiting the opportunities and avoiding the pitfalls of this new scenario. But not the same education as in the nineteenth century, which is still widespread today. This education has also just offered all that it could offer, to integrate to the new social and age groups.

## II. SOME CURRENT ATTEMPTS AT REFORMING EDUCATION

In the 1980s and 1990s many countries worldwide introduced educational reforms focused on the above-men-

tioned concerns. These countries have implemented their reforms from national, provincial, to community levels. But there are still other countries that have not undertaken educational reforms. In the current context, there is no guarantee that carrying out a number of unconnected national, provincial or local reforms is a sufficient strategy for social cohesion and world peace. For example, even countries with a high degree of educational development and well supplied with resources are dissatisfied with the quality of education and the way the reforms are taking shape. Some prominent representatives of the efforts to introduce reforms are going so far that they write about the 'impossible reforms' (Meirieu, 2000).

It maybe possible to mention that these feelings do not arise because of the difficulties of finding the direction of the changes, but rather due to the difficulties in finding ways of managing those changes.

There is in fact a general agreement that there is a need to strengthen the competencies and identities in order to empower the young and adult people to find best solutions to problems that are existing and known, and to new and unknown problems that are going to emerge. There is also general agreement to the fact that to do it, it is necessary to count on old and new knowledge, to be able to learn today unknown knowledge and acquire the awareness of the consequences of actions in the short, medium and long terms. In other words, there is a general agreement with the needs of learning to do, to be, to live together, and to learn.

The ongoing reforms to tackle the challenges refer to the educational structure, curriculum and system, and school governance.

Concerning the educational structures many countries are trying to move from what can be called a 'pyramid for the pyramid' invented in the nineteenth century, to a more flexible one, structured according to the stages of life and admitting different ways of using the educational opportunities. They are also trying to move from streams for the different sectors of the economy in a modern industrial society (primary, secondary and higher), to a diversity that accepts and caters to different identities without aggravating social inequalities. They are trying to preserve spaces for lifelong basic education and to offer supplementary training for skills, that can be rapidly outdated.

But from day to day it seems clear that curriculum reform is becoming the axis of the next reform period. Many countries are trying to move from rigid programmes to flexible frameworks. In fact, after years of being obsessed about updated information, the educational community realises that a continuously updated curriculum is impossible, and that to improve the quality of education, it is much more important to reform the curriculum concept and structure.

It is quite impossible to explain in a short presentation all the aspects involved in this new approach. There is not enough information to do it. But it is possible to anticipate at least four trends of the new curricula: (i) it

should really try to orient the selection of contents to make possible the promotion of the competencies 'to do, to learn, to live together, and to be'; (ii) it should try to change the logic of integration at the primary level and differentiation by 'academic disciplines' at the secondary level, going into a logic of a tension between integration and differentiation throughout childhood and adolescence, allowing schools to combine the disciplines, workshops, projects, etc.; (iii) it should suggest replacing methods oriented towards transmission, by methods towards the 'construction' of skills and the use of knowledge in context as a way to learn; and (iv) it should include proposals to evaluate procedures and competencies instead of measuring the amount of information learned.

There are mainly two changes that are being introduced between system and school governance. The first one concerns internal processes. This consists of a shift from the top-down control of well-established processes to the promotion of the institutional capacity to learn through networking. The second one concerns external processes. This consists in a shift from an isolated way of doing to a partner-oriented action.

### III. TENSIONS IN THE PROCESS OF EDUCATIONAL CHANGE

In talking about comprehensive reforms and, especially, about curriculum reforms, there is a general tendency to over emphasize or interpret results and products. The government representatives reinforce the perceived successes. Frequently, university representatives and unions prefer to emphasize criticism. But in fact those products and impacts are the results of very complex processes that suffer from a number of tensions. For the purpose of

an orderly presentation, these tensions can be classified as political, conceptual and institutional ones, although in practice the political, the conceptual and the institutional tensions are rather closely interwoven aspects or dimensions of the same process.

The acceleration and focus of the education reform and especially of the curricular transformation processes were made possible by the pressures when knowledge became a core item on the public agenda. This shows that there is a new consensus regarding the role of knowledge in the future development of societies and individuals. However, apart from the highly abstract question, the degree of consensus with regard to what, how, and when teaching should take place can be relatively limited.

Consequently, when reforms begin, it is necessary to deal simultaneously with at least two needs that tend to impose two different speeds on the processes. On the one hand, it is known that all consensus-building processes require a great deal of time. On the other, the possibility of legitimizing government teams depends on the speed with which they can provide responses to the felt needs of different social groups and segments, in the case of curriculum reforms, the need to have available frames of references and appropriate tools to improve the quality of education. In short, in all reform processes, it is necessary to resolve adequately the tension between achieving consensus and being efficient, to mediate between different positions and quickly provide appropriate products.

Furthermore, this has to be done frequently, in a context of dissociation between criticism and action. In fact, in many countries a factor which on occasion restricts the spectrum of participants in the processes seeking consensus and efficiency is the way in which some academic and intellectual sectors in the one hand, and political sectors on the other, interpret the role of criticism. Numerous academics and intellectuals consider the criti-

TABLE 1. An overview of the reforms mentioned in the text

Horizontal structure	Countries of Northern Europe, Brazil, San Pablo	'Comprehensive school' School for children for young people
Vertical structure	Australia	Secondary – 'Taffies'.
Curriculum	Argentina	'Basic content' (CBC), by level and not by year.
Content	Canada	Concepts, procedures
Methodologies	Australia	Primary school class with 100 children
Evaluation	Baccalaureate, Abutter, Maturity	PISA
Links	Portugal  Mozambique	Secondary schools in partnership with business teacher training institution with Danish NGO.
Management	UK (Scotland) Uruguay	School projects Flexibility of time

cal role that can be played within the framework of republican democracy to be the same as under military authoritarianism and attempt to monopolize this role. The paradoxical results of these attitudes are the abstention from the relevant decision-making processes relating to specifically professional aspects. Some politicians, for their part, reject all criticism of their administration, discrediting it as press manipulation, products of the opposition parties, or something of that nature. The result of this attitude is paradoxical, because they deprive themselves of external views which could provide them with interesting suggestions for an improved monitoring of their transformation. In fact, in both cases there is a lack of recognition of many personal and institutional efforts.

The tension between guaranteed national unity, federal power and local empowerment is also always present in reforms, and especially in the curriculum. Frequently, the professional teams tend to loose them when deciding percentage of contents, whoever has the power. But..., is it possible to establish a percentage of local mathematics contents? Most working teams are moving towards a recognition that in each content is a global, a national, a provincial or regional and a local dimension and that decisions have to be taken differently in each dimension.

In the constellation of situations, there are on occasions certain pressures from some decision-makers to restrict and accelerate the processes of consultation and participation to the minimum required to validate the activities, alternatives and proposals generated by the nearest available technical teams. This led to a loss of opportunities for improving quality and directing collective actions that can be provided by, for instance, curricular materials produced by genuine processes of consultation and participation.

Political tensions are not dissociated from ideological and conceptual tensions. Some requirements for political monitoring arise from conceptual decisions, such as how to manage the tension between discipline-centred or child-centred curricula. In fact, one of the most difficult decisions in curriculum reforms is whether or not to reproduce the discipline-based structure of academic and university research areas as a curricular structure. The result of this decision involves many teachers and pupils. Sometimes it is not easy for them to understand why some disciplines have to disappear, be merged or split.

There are also at least four other ideological or conceptual tensions to be managed in curriculum reforms. The first, refers to the interests of religious, ethnic and cultural groups; the second, refers to the interests of professional groups having different languages and also interests; the third, refers to promoting skills or knowledge; and the fourth, refers to indicating information that has to be communicated and focuses on values and procedures to be learned—both of which are linked to one of the most important institutional tensions, between decisions makers at governmental and school levels.

In fact, one of the most relevant tensions that takes place during reforms, and specially during the current curriculum reforms, relates to what should be laid down by the authorities to educational institutions which—conceptually—everyone accepts should be increasingly autonomous.

Educational institutions and teachers go through very important experiences, but experiences are not necessarily synonymous with competency to create the education needed in the twenty-first century. Therefore, another two tensions that emerge during reform periods are those between experience and competency on the one hand and experience and capacity for innovation on the other.

It is also necessary to mention at least some of the many other institutional tensions. In all complex reform processes, it is necessary to manage different timings, which can be described as political, technical, bureaucratic and pedagogical. In poor countries, it is necessary to count upon the existence of career functionaries having stability but low salaries on one side, and the hiring of highly paid consultants but with unstable positions, following the demands of the donors.

To go through all of these tensions, reform leaders have to be very clear that if the timing, needs, languages and interests of each actor are considered separately, everything will lead to conserving the nineteenth century education. Only a new vision of educational reform can help the reformers go through these complexities.

#### IV. FOUR PILLARS FOR A NEW VISION OF EDUCATIONAL REFORM: IDEAS, INFORMATION, CAPACITIES AND RESOURCES

Expanding education, and especially improving the quality of educational processes throughout curriculum reform on the one side and innovation on the other side, needs a new vision for action.

This new vision assumes the centrality of empowerment, politics and policy. It promotes the access to four pillars: ideas, information, capacities and resources.

The available resources for education are not always enough and have to be increased. Whatever resources are available should be efficiently used.

Oftentimes, it is amazing how the same ideas are repeated in very different contexts. It is also amazing to see very interesting ideas, which could be useful in one special context, are not known or recognized elsewhere. The strengthening of dialogue and, as far as possible, of certain basic political and social consensus on educational contents and methods, can really help to both find new ideas and also utilise the old ones better.

Nowadays, an enormous amount of information exists, however, it is not always available. In order to direct reforms, the different teams need swift and smooth availability of relevant information on contents, methods, as well as on processes of consensus building,

which may also be systematically articulated with quantitative, structural and qualitative information.

Lastly, it is said that there are not enough skilled people for undertaking the reforms. It is for this reason that the most important pillars to improve the capacities seem to be the strengthening of the collective and individual capacity of the actors at all levels of educational management and in the day-to-day activities of schools. This will allow the education personnel to participate in the processes of educational dialogue and consensus, to produce and use relevant information and to promote coherent reforms, especially curriculum reforms.

In other words, it is a question of promoting a virtuous circle between policy dialogue, availability, analysis and constant improvement of key information and the strengthening of the skills to manage the tensions. But there are two possibilities of managing the tensions. The first one, is to avoid complaints—letting things go on.

The second one, is conducting the reforms in the decided direction, bearing in mind that reforms and especially curriculum reforms involve political, social and professional commitments.

The IBE intends to contribute in the construction of this virtuous circle, organizing opportunities for methodologies of exchange, information sharing and capacity-building through the promotion of networking in all the regions of the world. Networking could be in the form of ideas, information and capacities, which are available but unequally distributed. It is just a question of mobilizing them.

### **Reference**

Meirieu, P. 2000. *L'école des parents: la grande explication*. Paris, Plon.

# A reflection on ‘learning to learn’: the four pillars of learning and their implications for curriculum reforms

Zhou Nanzhao

## I. INTRODUCTION

The IBE-PROAP Capacity-Building Seminar for Curriculum Specialists is part of UNESCO’s endeavour, in close co-operation with its Member States, to develop a broadened vision of educational contents and methods in emerging knowledge-based society and to facilitate a holistic approach to curricular reform/renewal in light of the guiding principle of learning throughout life.

In an information-intensive age, education is mandated to respond to demands in two directions: on the one hand, it has to transmit an increasing amount of constantly evolving knowledge and know-how adapted to a knowledge-driven civilization; on the other hand, it has to enable learners not to be overwhelmed by the flows of information, while keeping personal and social development as its end in view. To quote from the Delors Report, *Learning: the treasure within*, ‘Education must ... simultaneously provide maps of a complex world in constant turmoil and the compass that will enable people to find their way in it’ (p. 85).

The reform of curriculum content has become increasingly important, inasmuch as it is essential that what students learn is relevant to them as individuals and citizens, in their present and future context, as well as to community and societal development. It is not so much based on the delivery of ‘facts’ and knowledge, but rather on the skills of learning that can be consistently applied in an ongoing manner, long after leaving the formal education setting.

This presentation focuses on the changes in education emerging over the very recent past, which have mandated fundamental rethinking on roles of education and fundamental changes in the content of education. It is intended to contribute an alternative to the world-wide efforts in the reorganization of education. It is argued, as in the Delors Report, that if education is to succeed in its tasks, curriculum as its core should and could be restructured and re-built upon the four pillars of learning: *learning to know* for acquiring the instruments of understanding, *learning to do* for acting on one’s environment, *learning to live together* for co-operation with others in all human activities, and *learning to be* for the full flowering of human potential and multi-dimensional development of the ‘complete person’.

## II. THE CONTEXT FOR ‘CAPACITY BUILDING’

With all the current rhetoric around the region relating to the reform of educational content, delivery and systems, it is essential to understand the context of and need for ‘capacity building’, as it has become known. In order to complete the process of educational reform, the following contextual factors articulate important pre-requisites for building the capacity of our education systems to deliver high quality and relevant curriculum to learners of all ages.

- Important new policy perspectives are emerging, and required, in the light of the changing nature and trends of development around the region.
- At the same time, these changes have led to a need for revision and improvement of the educational content provided to learners, so that what they learn is relevant to their lives and contexts.
- A broad understanding of the structures and theories of knowledge by those responsible for building the capacity of our education systems is fundamental, so that sound decisions are made.
- Similarly, specialized knowledge of the specific content and contexts of the various disciplines and subject areas is essential before changes can be properly made.
- No one can safely make changes to build the capacity of education without understanding the psychological characteristics and learning needs of the target groups.
- Finally, education policy makers must have a thorough understanding of the pedagogical principles of organized teaching and learning.

## III. THE NEED FOR CURRICULUM REFORM

In essence, there is now a need for the fundamental reorganization and re-packaging of the educational content made available to learners.

School curriculum in most Asian education systems has been much over-loaded, and yet many educators have continued to attempt to include new content in the curriculum in order to reflect changes and new needs. Therefore, there is now widespread overcrowding of the



total curriculum in most systems. Too much material is competing for a finite time available for delivery, with the result that some material is of necessity ignored or brushed over.

Further, education has traditionally not so much involved imparting the skills of learning, but rather the cramming of information and facts, often unrelated to the learners' needs, and largely due to the overcrowded curriculum. The content has also suffered from being narrow in focus and single-discipline oriented, without the benefits of establishing and building on links with other disciplines in an integrated approach for a broad education. Traditionally, there has been a bias against the affective, ethical and values dimension of curriculum content, now seen as vital for a balanced education.

The design and organization of education systems has usually been centralized, with the head offices directing in a top-down, one-way flow of education delivery in a unified and single-style approach. Tragically, the product delivered is all too often also irrelevant to the contemporary needs of learners.

The teaching of life skills and social skills has not previously been recognized as important, nor indeed defined. Life is infinitely more complex in the world of the twenty-first century, and it is important to ensure that learners are adequately equipped to deal with them.

It is also widely observed that the school system tends to cram a narrow range of information into students that specifically prepares them to gain admission into some tertiary course with its restricted entry criteria. This limited approach does not adequately prepare students for life after students leave the security of the formal learning centres and systems.

#### IV. CHANGED/CHANGING CONTEXTS IN CURRICULUM REFORM

A wide and very significant range of contextual changes combine to emphasize the importance of curriculum and education renewal. Several major factors can be identified:

- With the explosion of information and communication technologies around the world, we are witnessing the emergence and consolidation of a knowledge-based economy and society. Such a major change requires important and expanded roles for education.
- The rift between the rich and the poor around the region is not decreasing, but widening. The Asia-Pacific region has approximately 1.3 billion of its people living below the poverty line, living on less than US\$1 per day, and increasingly helpless to alleviate this gap. Policy makers now see education for poverty alleviation as one way of making some inroad into this dilemma.
- As an extension to this last scenario, we now have a new phenomenon described commonly as the 'digital

divide', whereby the huge gap between those who have access to information and communication technology and those who do not is exacerbated. Strategic educational policies and planning can go some way to reducing that gap.

- As signaled in the Delors Report, several tensions are emerging. One key example is the threat to the preservation of cultural identity and traditional indigenous knowledge in many communities, due to the overpowering globalization impacts of the knowledge society. There is a growing need for intercultural learning and international understanding, in order to redress this impact.
- Despite the many obvious progressive developments around the region, there are still many people who suffer from what can best be described as social exclusion, due to economic inequity. For instance, 800 million people are under-nourished, 1.3 billion are living without safe water, 880 million adults are functionally illiterate, and around 113 million children still have no access to primary education. Therefore, the absolute priority that UNESCO places on social equity and education for all (EFA) to reach the unreached is very soundly based.
- As a direct consequence of the emphasis around the region on economic growth at any cost, severe environmental and ecological degradation has occurred in many countries. The importance, therefore, of environmental education programmes that articulate sustainable growth and development cannot be over-emphasized.
- The processes of material progress and technical change have in many instances led to the alienation and de-humanization of many people. Introducing education programmes that focus on humanistic values can lessen these tragic effects.
- The increasing AIDS epidemic (18.8 million people in the region have died since 1983) shows the clear need for preventive education and culturally-based approaches to prevention and teacher training for 'life-skills' programmes.

#### V. A NEW EDUCATIONAL VISION FOR ACTION

These changing contexts demand a new vision for education, a vision that accepts the inalienable right for all people to have access to a relevant education, and that many problems and issues can successfully be addressed through appropriate educational policies and programmes.

In a broadening vision for education, it is increasingly accepted that education has expanded roles:

- as a fundamental human right;
- as an investment, for economic, social and political advantages;
- as a tool of empowerment for disadvantaged groups;
- as a principal means for the full development of human potential and individual talents;

- as a cornerstone for a culture of peace;
- as a major avenue towards the sound development of learning societies.

## VI. MAJOR SHIFTS IN EDUCATION

Over the past few years, several major directional shifts in education have become apparent, which will have major implications for curricular changes:

- From 'schooling' (with the expectation that people only learn during their relatively brief time in the formal school system) to continuous lifelong education.
- From teaching as the delivery of curriculum content, to learning as an active role by the learner.
- From inequality of access to equality of education, or in other words, from 'the best education for the best' (most privileged students) to 'the best education for all'.
- From a focus on financial/material inputs, onto the learning process and the resultant outcomes.
- From a narrow, discipline-based curriculum and teacher-centred education, to a learner-centred, integrated, inter-disciplinary learning.
- From purely quantitative evaluation of cognitive learning achievements in terms of test scores, to qualitative as well as quantitative evaluation of all dimensions of learning outcomes.
- From rigid assessment of individual students/teachers, to a broader assessment that includes school and system performance indicators.

## VI. THE FOUR 'PILLARS OF EDUCATION' AS FUNDAMENTALS

In order that educators and policy makers understand the relevance of the four pillars, a brief snapshot follows of what each relates to in terms of educational context.

### 1. *Learning to know*

This pillar focuses on combining sufficiently broad general knowledge and basic education, such as might be experienced in elementary schooling, with the opportunity to work in depth on a small number of subjects, in the light of rapid changes brought about by scientific progress and new forms of economic and social activity. Specific aims include:

- to master the instrument of knowledge;
- to learn how to learn and to discover, so as to benefit from ongoing educational opportunities continuously arising (formally and non-formally) throughout life;
- to develop the faculties of memory, imagination, reasoning and problem-solving;
- to understand about his/her environment;
- to think in a coherent and critical way;
- to communicate with others;

- to acquire a knowledge of the scientific method and instruments;
- to develop a scientific spirit and an inquiring mind;
- to acquire independence of judgement.

### 2. *Learning to do*

Emphasis is on the learning of skills necessary to practise a profession or trade, including all schemes in which education and training interact with work. People also need to develop the ability to face a variety of situations, often unforeseeable, and to work in a team approach. Partnerships between education, business and industry are encouraged. Key aims are:

- to apply in practice what has been learned;
- to develop vocational/occupational and technical skills;
- to develop social skills in building meaningful inter-personal relations;
- to transform knowledge into innovations and job-creation;
- to develop competence, a mix of higher skills, of social behaviour, of an aptitude for team work, and initiative/readiness to take risks;
- to develop personal commitment to work;
- to enhance the ability to communicate and to work with others;
- to manage and resolve conflicts.

### 3. *Learning to be*

The development of human potential to the fullest is the major priority of this pillar. As we go forward in the twenty-first century, everyone will need to exercise greater independence and judgement, combined with a stronger sense of personal responsibility.

An underpinning principle could be said to be 'the aim of development is the complement of man, in all the richness of his personality', with education contributing to the all-round development of each individual, in the face of the 'dehumanization and personality-alienation' that comes as a result of technical change. Education is above all an inner journey, the stages of which correspond to those of the continuous maturing of the personality. Education as a means to an end of a successful working life is thus a very individualized process. At the same time, it represents a process of constructing social interaction. Fundamental aims of learning to be include:

- cultivating qualities of imagination and creativity;
- developing diversified talents and dimensions of personalities—*aesthetic, artistic, literary, sporting, scientific, cultural and social*;
- developing critical thinking and exercising independent judgment;
- developing personal commitment and responsibility for the public good;
- tapping fully the talents (treasure) hidden within each individual.

#### 4. *Learning to live together*

In the current context of globalization, the Delors Report places particular emphasis on this pillar. We must come to understand others, their history, traditions and cultures, living and interacting peacefully together. Aims of this pillar include:

- to discover others;
- to appreciate the diversity of the human race;
- to know oneself;
- to be receptive to others and to encounter others through dialogue and debate;
- to care about others;
- to work toward common objectives in co-operative undertakings;
- to manage and resolve conflicts.

#### VIII. APPROACHES TO CURRICULAR RENEWAL AND REFORM

Given that we have now entered the twenty-first century, it is absolutely essential that educators and policy makers use the broad framework of the four pillars of education and learning to develop a relevant education that will effectively meet the needs of the region's people. In summary, it is advocated that:

- the four pillars of education be used as guiding principles for educational content and practice, in line with the principle of lifelong learning;

- the four pillars of education be used as integrated components of teaching units in individual subjects;
- the four pillars of education be used as themes for inter-disciplinary studies and programmes on major societal or scientific/technological themes, such as in the International Baccalaureate Organisation's *Approaches to learning; theories of knowledge (modules as 'building-blocks' of learning)*;
- diversification of curricular and extra-curricular activities be developed;
- decentralization of curriculum planning be implemented, taking into account the various needs of local learning communities;
- utilizing educational resources in virtual learning environments, in addition to traditional settings.

#### IX. CONCLUSION

The four pillars of education, as articulated in the Delors Report, provide an excellent basis for the reform and renewal of the basic education curriculum in the Asia-Pacific region. If applied appropriately within the contextual settings around the region, these pillars will add great value to the relevance of curriculum content and the delivery of a quality education that is designed to meet the lifelong needs of learners in their communities.



# Capacity-building for curriculum reforms: a South-East Asian perspective

Tan Khun

## I. INTRODUCTION

The new millennium has brought with it a heightened sense of urgency for a greater regional co-operation in virtually all spheres of human activities. This urgency is a gift of 'globalization', which began to gain momentum towards the end of the twentieth century to become the gospel of the twenty-first century. It also carries with it, its own share of novelties, problems, opportunities and complexities that call for responses and resolutions which transcend national boundaries. Education is one area of activity that has been among the earliest to recognize the value of and need for regional co-operation. Some thirty years before the term 'globalization' came into vogue, the countries of the Southeast Asian region formed SEAMEO (Southeast Asian Ministers of Education Organization, established on 30 November 1965, with the Secretariat based in Bangkok, Thailand). The objectives were to work towards 'strengthening regional understanding and co-operation in education, science and culture for a better quality of life.'

In keeping with its mission statement, SEAMEO is geared towards:

- The establishment of networks and partnerships;
- The provision of an intellectual forum for policy makers and experts; and
- The development of regional 'centres of excellence' for the promotion of sustainable human resource development.

Since its establishment thirty-five years ago, SEAMEO has achieved remarkable progress in human resource development among its member countries in the areas of education, science and culture. This has been made possible by the close links and spirit of co-operation that has prevailed over the years among the member and associate member countries. This spirit of co-operation can provide the foundation on which curricular reform in education could be built to enable the region's education systems to meet the challenges of globalization.

## II. CURRENT STATUS OF CURRICULAR REFORMS IN THE REGION

The term 'curriculum' as used here, refers to 'school' curriculum, or curriculum that constitutes a child's first eleven or twelve years of basic formal education—in the primary as well as secondary school environment. Within this setting, a comparative overview of the region's diverse school curricula becomes possible and meaningful.

A study of the region's new or 'about-to-be-adopted' national school curricula will reveal some common trends in the curricular reforms expected to be implemented by the respective countries. The following are some of the common trends:

### *1. Increased democratization of educational opportunities*

In all countries of the SEAMEO region, serious efforts have been made towards providing free and/or compulsory education up to the ninth or even the twelfth year of school education. This augurs well to increase literacy rates and usher in an era where an educated population is receptive to concepts such as lifelong learning, continuing education and self-improvement.

### *2. Raised profile of selected components of the curricula*

This is especially true in science and mathematics, information technology usage and application, and the acquisition of an international language—especially English. Serious efforts have been made towards a balanced curriculum in each country, such as, integrating elements of various components across the curriculum. However, it is quite apparent that the above three components stand out in all the reformed curricula or 'about-to-be-reformed' curricula. The rationale behind these components' prominence is in line with global trends as the looming dominance of the k-economy would invariably require that the human resources of any region be scientifically literate, and IT-functional.

### *3. Pedagogical shift towards child-centered, activity-based methodology*

Increasingly, the curricula of the countries in the region advocate a shift from the traditional teacher-centred

methodology towards one that is child-centred and activity-based. This move is not entirely a new one but it does differ from the previous ones in that it goes beyond mere child-centred activities (such as lists of procedures in science practical) towards involving students in problem-solving and investigative work. Such a trend would entail the employment of a wide selection of teaching strategies, such as co-operative learning, higher-order of thinking skills and active learning.

#### **4. Assessment, move towards alternatives**

While the traditional paper-and-pencil tests still prevail in the regional curricula, such traditional notions of academic assessment through a single valid way are increasingly giving way to the application of alternative instruments of assessment. These alternatives, designed in forms such as portfolios, projects, self-assessment, etc., would provide a more holistic representation of the students' knowledge and progress. Thus, this move represents a shift from the traditionally upheld instruments based on verbal-linguistics and logical-mathematical skills towards assessments that include a greater range of human capacities and intelligences, in tune with prevailing global trends on school assessment.

### **III. SEAMEO'S ROLE IN CURRICULAR REFORM IN THE REGION**

'Curriculum', whether taken in its narrow sense or viewed in a broader perspective, has to in any case be effectively implemented to produce the desired outcome. Effective implementation entails aspects of: planning, teaching, learning and assessing. All these aspects constitute major domains of teacher education and training programmes—for the professional development of teachers. Successful implementation of a curriculum would require efficient and well-equipped implementers—the professional teachers. In the same vein, any curricular reform depends greatly on the implementers at the school level: the quality of the school managers and teachers. In this respect, the emerging scenario in some member countries of the SEAMEO region is cause for major concerns. In the countries of the Indo-China region for example, there are shortages of teaching staff—the untrained teachers and the under-trained teachers implement the curriculum without sufficient understanding, thus compromising the curricular reform.

SEAMEO, as a regional organization committed to promoting regional co-operation in matters related to education and human resource development, plays a positive role in helping the member countries to overcome difficulties faced in implementing their curriculum so that they may maximally benefit from these reforms. SEAMEO has currently fourteen centres of specialized

institutions hosted by member countries. Each centre's primary focus is on training educational personnel, besides engaging in research, consultancy and training capacity that go beyond its 'core' mandate. These centres are structured in three groupings, namely: (a) learning, (b) health, (c) agriculture, natural resources, environment. Of the three groupings, three centres appropriately support curricular implementation and reforms in basic education. These three centres have a direct impact on and contribute to capacity-building towards curricular reform. These are: (i) Regional Centre for Education in Science and Mathematics (SEAMEO-RECSAM); (ii) Regional Language Centre (SEAMEO-RELC); and (iii) Regional Centre for Educational Innovation and Technology (SEAMEO-INNOTECH).

The above-mentioned centres have, over the past three decades, built up a wealth of experience and expertise in training and professional activities aimed at enhancing the skills of teachers, educators and school managers in their respective fields. Their specializations correspond to the core concerns of the member countries' curricular reforms in science and mathematics, English language, educational leadership and innovations for development.

Building the capacities of teachers and school managers is essential to fully realize the potential of any curriculum implementation and reform. The three SEAMEO centres that have been singled out to be in the forefront of the organization's involvement in the region's curricular reform have been making tireless efforts at enhancing the skills of the grassroots workers at school level for the past three decades or so. These workers are none other than the teachers and managers of the countless schools in the region. As the region progresses, societal demands and expectations on the schools become greater, making their tasks more complex and multifarious. These three centres with their specializations are by no means adequate to successfully meet the targets set in relation to curricular reforms by each country. However, as their specialized expertise is directly relevant to the core-elements of the reforms, it is hoped that their efforts and contributions in basic capacity-building towards effective curricular reform in the region's education systems would be significant. SEAMEO, as a whole, is sensitive to the need to continuously re-orient and adapt itself to new situations in order to stay abreast of new developments and changes in the new age. The centres' activities reflect this philosophy, and their training programmes are continuously upgraded to meet new requirements. Presently, all of the three centres have sufficient room and training capacity to accommodate an increase in the number of trainees. The good news is that a certain momentum has already been generated and no longer are prohibitive external inputs required to take the great strides necessary to keep pace with the ceaseless changes that characterize our times.

# PART TWO:

## STRENGTHENING CAPACITIES FOR CURRICULUM REFORM

# Analyzing existing curriculum frameworks for change

Lucille C. Gregorio

## I. BACKGROUND

A project—'Curriculum Innovations in Basic Education: Preparing the Learners to Meet the Challenges of the New Millennium'—has received extra-budgetary support from the Japanese Funds-in-Trust grant to UNESCO. The implementation of the project was initiated in September 2000, with the preparation of a concept paper for joint programming between the International Bureau of Education (IBE) and the UNESCO Principal Regional Office for Asia and the Pacific (PROAP). The partnership with IBE took concrete steps during the Seminar on 'Capacity-building for Curriculum Specialists in the East and South-East Asian Region,' held in Bangkok Thailand in December 2000. This was hosted by the Ministry of Education, Thailand, with eleven countries and one SEAMEO Regional Centre participating. These were: Cambodia, China, Indonesia, Japan, Lao PDR, Malaysia, Mongolia, Philippines, Republic of Korea, Thailand, Viet Nam, and SEAMEO RECSAM. The seminar was aimed at building capacities in the areas of curriculum reform and innovation at primary and secondary levels, and also to prepare the participating countries in undertaking the 'Situation Analysis of the Existing Curriculum,' as a basis for pursuing curriculum reforms.

## II. RATIONALE OF THE PROJECT

The South-East and East Asian region is faced with a difficult situation as a result of the economic downturn leading to a new economic and social order. The region is also challenged to cope with the scientific and technological progress and the advances in information and communication technology, which are mostly happening in the developed world. Despite continuous efforts to improve the science education programmes, society believes that the reforms taking place are still slow. Curriculum structure and content and the teachers' skills become increasingly out-dated. Even in cases where formal educational institutions succeed in keeping up-dated with the advances in knowledge, information learned in school soon becomes obsolete in a short period of time. Furthermore, educational reforms are not implemented effectively.

Both regionally and internationally, there have been trends toward curricular reforms and innovations to introduce learner-centred educational content and systemic changes responding to national/regional development needs. However, a large gap needs to be filled to build national capacities for curriculum reform through intellectual guidance and advisory services. UNESCO intends to fill this gap.

In August 1999, *Asiaweek* mentioned twenty trends for the new millennium that are expected to shape developments in the Asian region and the world, and the lives of people in the years ahead—both positively and negatively. Most of these are attributed to science and technology advances, and the introduction of new forms of technology, i.e. 'the power of the microchips.'

We are wondering, however, how the advances in science and technology will affect a region characterized by a wide range of diversity—economically, politically, geographically, culturally, etc. In 1995, the Asian region had 60% of the world's population, 625 million out of the 885 million adult illiterates of the world, 74 million children, comprising 50% of the world's unschooled children. Some 64% of the illiterates are women, and 66% of children not enrolled in schools are girls. Of course, most of these are in Southern Asia. Many countries are predominantly rural and agricultural with low per capita income and high population growth rate; high unemployment; and with a high incidence of HIV/AIDS, and generally live below the poverty level. The World Forum on Education for All (Dakar, 2000) showed some improvements in the above figures, but these are not significant enough. Besides, the 'quality of education' has not been given enough emphasis.

In 1993, Project 2000+: Scientific and Technological Literacy for All was launched at the UNESCO Headquarters in Paris, within the framework of 'Education for All'. The provision for providing basic learning needs of youth and adults recognizes the need for a scientifically and technologically literate society. Scientific and Technological Literacy will provide learners with an understanding of the positive use of science and technology for the social good, provide opportunities for rational decisions to prevent destruction of the physical environment, to preserve and ensure the survival of the future generation, and allow cultures to renew cultural traditions with scientific wisdom.

The 30C/5 (UNESCO's Draft Programme and Budget, 2000–2001), stresses the need for 'renewal of curricula, focusing on integration of various curricular elements,' and the need to intensify science and technology education (STE), with emphasis on scientific knowledge and technical skills necessary for meaningful participation in the knowledge society of the future. The activities envisioned in this project would closely link to UNESCO's regular programme and would be included in the 'monitoring and evaluation plan.'

The World Conference on Science organized by UNESCO and the International Council for Science, held in Hungary in June 1999, recommended that gender and cultural diversity, and response to educational and societal needs be considered in curriculum development. The conference also recognized that science education reforms will not solve problems without 'social change', and therefore, the participation of social science and humanities was well applauded. It was during the Conference that the World Social Science Report was launched.

The Delors Report, the main source of inspiration on education for the twenty-first century, proposed reorientation and reorganization of education systems based on the guiding principle of 'learning throughout life,' building on the 'four pillars of learning' (learning to know, learning to do, learning to be, learning to live together) through curricular innovations/reforms.

The 6 September 1999 issue of *Asiaweek* points out that 'Asians have always been proud of how well they educate their children'. The Third Science and Mathematics Study has shown that Japan, Korea and Singapore scored highest in science and mathematics compared to the rest of the countries participating in the study. However, governments are realizing that the young learners are not at all prepared to meet the new millennium—'where thinking and creativity' would be the most important attributes.

There are also questions being raised today, as to whether the present teaching/learning in school and out of school provide learners with opportunities to create their own abilities to develop skills and competencies in acquiring and processing information, in risk taking, and develop self-confidence in solving problems and decisions-making.

This project, therefore, seeks to look into the strengths and weaknesses of the curriculum for basic education of the eleven participating countries in East and South-East Asia, moving towards a sub-regional strategy for developing a curriculum framework for the learners of the twenty-first century.

## II. THE PROJECT GOAL AND OUTCOMES

The project will provide some assessment of the quality of learning at the basic level, and the effectiveness in preparing the learners for the challenge of the new mil-

lennium, with 'lifelong learning' as the ultimate goal. Considerations would be based not only on the recommendations of the world conferences held from 1990, but more so in the 'Four Pillars of Learning,' advocated by the International Commission on Education for the Twenty-First Century.

To attain this goal, a regional framework and guidelines were agreed upon by the participants of the capacity-building seminar.

## III. THE SITUATION ANALYSIS GUIDELINES AND FRAMEWORK

### *Part I: A situation analysis of the National Curriculum for Basic Education*

- I.1. *Brief introduction/background on the national curriculum:*
  - I.1.a Pertinent laws and policies bearing on the national curriculum for basic education;
  - I.1.b The underlying philosophy and rationale of the national curriculum;
  - I.1.c Major goals and objectives of basic education;
  - I.1.d Vision of a student completing primary-level, elementary-level, and secondary-level education (as expressed in terms of specific knowledge and competencies learned and acquired by the student).
- I.2 *Curriculum development and design:*
  - I.2.a Description of the prevailing organizational structures and mechanisms and consultation processes involved in curriculum;
  - I.2.b Development (the role of ministries/ departments of education, other national bodies, regional agencies, and local schools and communities in curriculum development; balancing the demands of the prescribed core curriculum with local needs and circumstances or the autonomy of schools in translating the core curriculum into a school-based curriculum);
  - I.2.c An overview of the existing curriculum design for basic education describing the subject matter or topical coverage by grade level or year and the number of hours/minutes devoted to each subject or topic at the primary, elementary and secondary grades.
- I.3 *The implementation of the national curriculum:*
  - I.3.a The adoption of the national curriculum in the formal school system (or by public and private schools);
  - I.3.b Existing infrastructure support for the national curriculum (i.e. the adequacy of classrooms and physical facilities, and of



- equipment, laboratories and libraries in schools and learning centers);
- I.3.c The state of textbooks and instructional materials;
- I.3.d The training of teachers in subject matter/topical content, pedagogy updates, and the use of textbooks and other instructional materials.
- I.4 *Feedback (monitoring, reporting and evaluation) mechanisms on the implementation of the national curriculum:*
- I.4.a Institutional supervision and reporting systems adopted by schools, regional bodies and national ministries/departments of education;
- I.4.b Achievement indicators (enrolment rates and drop-out rates by grade/year level; per cent passing of national achievement tests or qualifying examinations at primary, elementary and secondary levels);
- I.4.c External or commissioned reviews regularly or periodically undertaken by special committees or task forces on the curriculum or the education sector;
- I.4.d Research-based studies on the state and effectiveness of various aspects of the national curriculum and its implementation, i.e., as research on the effectiveness of curriculum content, existing pedagogies and instructional approaches, teacher training, and of textbooks and instructional materials).
- I.5 *A discussion on the specific strengths and weaknesses of the national curriculum and its implementation:*
- I.5.a Its strengths;
- I.5.b Its weaknesses;
- I.5.c Summary of the major recommendations for improving the national curriculum.
- I.6 *Recent and ongoing curricular reform initiatives:*
- I.6.a Status of implementation;
- I.6.b Factors facilitating and/or constraining the implementation of curricular reform initiatives.
- I.7 *Summary and conclusions: assessment of the National Curriculum for Basic Education.*
- II.3 *Integrating the principle of learning/education throughout life (as against simply education for higher learning or education for work, cf. the Delors Report) into the underlying rationale and philosophy of basic education.*
- II.4 *Integrating/incorporating the four pillars of learning expounded in the Delors Report (learning to live together, learning to know, learning to do and learning to be) into the learning outcomes of the basic education curriculum along with the following:*
- II.4.a The knowledge and concepts to be learned/acquired by students (learning to know);
- II.4.b The mental (thinking, reasoning, etc.) faculties, emotional skills and qualities, the creative/aesthetic sense, the spiritual well-being, or the self-knowledge, discovery and development to be encouraged among students (learning to be);
- II.4.c The attitudes and values to be imparted to students with some emphasis placed on those supportive of tolerance and peace, respect for others and social cohesion and harmony (learning to live together); and
- II.4.d The practical application skills and work-related experiences and competencies to be similarly developed among students (learning to do).
- II.5 *Promoting interdisciplinarity in the basic education curriculum:*
- II.5.a Reconceptualizing subject-matter contents into interrelated themes or topics (as against dividing these into separate subjects or fields of studies) and highlighting their coherence and connectedness;
- II.5.b Reorienting instructional methods and pedagogies towards interdisciplinary and more holistic approaches.
- II.6 *Proposals (for workshops, training seminars, development of new teaching modules and materials and other activities) for further advancing the new framework for a basic education curriculum.*

#### IV. FUTURE PLANS

The participants from the eleven countries went back to undertake a 'Situation Analysis of the Existing Curriculum,' in their respective countries. By the middle of 2001 we expect to publish the eleven country situation analyses and a regional synthesis.

Based on the outcome of the country situation analysis, a sub-regional strategy for developing a curriculum framework for the learners of the twenty-first century will be formulated. This will be later utilized for the 'Training of Curriculum Developers and Teacher Trainers for Curriculum Change.'

# The role of information and knowledge in curriculum development

*Isabel Byron*

## I. THE NEW DEMANDS FOR EDUCATION

Curriculum development is a complex on-going process, which must constantly change to reflect changes in broader society and to take into account evolving knowledge about learning and developmental processes. Effective curriculum development for adequately meeting learner needs should involve constant reflection, debate and decision-making about what is to be learned and why, how it is to be learned, the roles of teacher and learner in the educational process, the roles of other stakeholders, and the relationship between the school and the community.

Regular curriculum renewal is considered increasingly necessary in education systems around the world due to the rapid changes taking place in contemporary society. According to Skilbeck (1998), curriculum renewal may be defined as 'the gearing of educational contents and procedures to a changing and uncertain world'. This world is characterized, among other things, by ever-more-rapid technological and scientific development; a growing dependence on information and knowledge as the most important resources for economic advancement; an increasingly globalized economy leading to growing inequality between rich and poor countries; an ever greater intermingling of peoples and cultures; severe ethnic, cultural and political conflicts in many countries; and an erosion of traditional value systems in nearly all societies.

The issues listed here-along with a number of others discussed in other chapters of this report-indicate the great challenges posed to the process of curriculum development and reform in today's society. The rapid pace of change, and the central role played by information and knowledge in development, have led to an on-going debate about the nature and purpose of learning in school and in society, with the meaning of education being re-examined and redefined. Traditional education has proved to be inadequate for the needs of the 'post-modern' society. As discussed elsewhere in this report, acquiring the four pillars of knowledge—learning to know, learning to do, learning to be, and learning to live together—is advocated as the desired objective of the educational process, equipping individuals with the knowledge and skills needed to learn throughout life, to

be productive and active citizens, enabling continued personal growth, enhanced economic and social development, and fostering social cohesion (Delors et al., 1996). The concept of 'learning to learn' has come to dominate educational discourse, being seen as the ultimate outcome of learning.<sup>1</sup>

To equip young people in this way requires a huge shift in the traditional contents and methods of education as they continue to exist in the majority of schools around the world. The concept and meaning of knowledge has altered. It is no longer considered finite and unchanging, but is seen instead to be continuously evolving. New discoveries are constantly being made and new ways of interpreting and doing things are being found, with some knowledge rapidly becoming obsolete. Knowledge is also no longer seen as compartmentalized in rigid disciplinary fields, but rather the relationships and interrelationships between different fields are recognized. The learner is acknowledged to play an active role in constructing knowledge as he/she interprets and interacts with the surrounding world.

Furthermore, the learning of a range of skills, attitudes and behaviours needed for living in contemporary society is considered as important as the acquiring of knowledge itself, and they are, in fact, seen as an integral part of knowledge. Many of these skills and behaviours focus on preparation for the needs of the labour market.<sup>2</sup> Others are concerned more generally with fostering personal and social well-being. These changes have great implications when deciding what and how to teach in schools.

To respond to these new concepts of education, much emphasis is being placed on interdisciplinary learning and integrated curricula, as well as on student-centred, activity-based approaches.

In light of the new demands on the curriculum development process, it is increasingly agreed that it should involve a wide range of actors or stakeholders, not just educational policy-makers, researchers and curriculum specialists, but community leaders, representatives from economic sectors, future employers, parents, students and, most importantly, the teachers themselves. In this overview of the role of information in curriculum development, the target group being considered is those primarily responsible for curriculum design. This would include directors of curriculum development units and

curriculum/subject specialists working in such institutions or in schools, as well as academic faculty working directly with education departments and schools in this field, teacher educators, school principals and some teachers.

Curriculum developers have the task of translating educational policy decisions into detailed curriculum plans for individual subject areas, specific grades and levels of education. The level of freedom or autonomy given to them in this task varies from country to country, as does the degree to which the curriculum development process is a truly participatory one. Whatever the situation, the main actors in the process should be equipped to make suitably informed decisions about what and how children learn in schools.

## II. WHAT TYPE OF INFORMATION IS NEEDED?

Decision-making for curriculum developers is often dictated by external forces and pressures: political decisions, world economic trends, the increasing urge to be competitive and to respond to the international drive for change. Often, there is insufficient time for reflection and considered use of research findings and other documented knowledge. Nevertheless, systematic use of information is felt to be essential to quality educational provision (Reimers and McGinn, 1995, 1998).

Curriculum developers need access to information which is up-to-date, reliable, relevant, and expressed in language which is easily understood. Educational professionals ideally need orientation towards quality information suitable for their specific needs. They will want information packaged in a way which concisely presents solutions or practical approaches to specific issues. In an information age, skilled management of information and knowledge is considered vital to the success of any sector, including education. In order for knowledge to be managed effectively, educational professionals themselves need to understand the processes of knowledge creation, dissemination and application (OECD, 2000).

Reimers and McGinn define information as 'knowledge that reduces uncertainty' (1995, p. 20). The OECD distinguishes between information and knowledge, establishing the latter as 'a stock of experience', rather than a mere product (2000, p. 57). Knowledge is classified into four categories, namely, 'know what' (facts or information); 'know why' (principles that explain phenomena); 'know how' (competence and skills); 'know who' (who knows what and who knows what to do) (ibid., p. 14–17). Curriculum professionals need all of these types of knowledge, which will come from different sources and may be more or less easily obtained. As the OECD publication explains, while 'know what' and 'know why' may be recorded in databases and various published media, 'know how' and 'know who' depend not only on recorded data, but also on human interaction and social relationships. To obtain access to these types of knowledge, training, interaction with a range of actors and effective professional networking are vital.

There is a wide range of educational information arising from a multitude of sources. Listed below are a number of types of information felt to be necessary or useful for effective curriculum development, although the list is not intended to be exhaustive:

- Major political, social, economic, cultural trends at national and international levels;
- Specific information about the labour market, predictions of future training needs;
- Educational policies at national, regional and international levels;
- Curriculum development and reform processes and trends in other countries (in the same region, in countries at similar levels of development, in more developed countries);
- Recent research findings on learning and development, curriculum development and student achievement;
- Recent research in fields central to curriculum development: philosophy of education, psychology of education, sociology of education;
- Comparative research and studies;
- Curricular approaches within specific subject fields;
- Innovative teaching/learning methods;
- Information on students' needs and interests;
- Information on existing classroom practices, teacher attitudes and behaviour;
- Information on community needs and interests;
- Approaches to avoid in curriculum development; what hasn't worked nationally or in other contexts—and why;
- Information on the nature of knowledge and its effective management;
- Information on the process and management of innovation and change.

In addition to information for making decisions, curriculum specialists need to know how to communicate their own decisions to others, to teachers in particular, but also to parents and other key stakeholders in the educational process. At the same time, it should be recognized that curriculum developers are also producers of information and knowledge themselves. They may be researchers in their own right and may have been teachers in the past. Their professional experience has given them very significant knowledge, but they also need the skills to put this to effective use by passing it on to others.

Curriculum specialists need to understand the process of change in order to implement innovation. Successful curricular innovation can only come about through carefully planned collaborative efforts involving all key partners in the educational process. Anderson (1992) observes that effective curriculum reform requires systemic change, that the various elements of the education system are dynamically interconnected and are also linked to other social systems. Curriculum change will have impacts throughout the system and all those involved in reform should be made aware of and be prepared for their role in the process. Anderson further stresses that, in today's context, curricular change is like-



ly to be on-going and long term, while those involved in the process need to understand the dynamics of this situation.

### III. SOURCES OF INFORMATION FOR CURRICULUM DEVELOPMENT

#### 1. *Electronic sources*

The information technology revolution has transformed the possibilities for disseminating and accessing information. Key sources of information of potential use to curriculum developers, to be found through electronic means include: databases and databanks; and on-line journals and websites of numerous institutions working in education. The Internet also provides access to fora and discussion groups a new medium which is potentially very useful for sharing information, views and expertise among curriculum professionals on an international level.

#### 2. *Networking*

Interacting with others, both within and outside one's profession, is a very important means of obtaining information and increasing one's knowledge. Networks, now revolutionized by the new information technologies, are strongly recommended as means of creating, disseminating and applying knowledge. Ideally, they provide opportunities not merely for exchange of information, but for collaborative efforts which allow the learning and practical application of new knowledge (OECD, 2000, p. 74-76). Interaction with sectors and professionals outside the education sector can bring in new ideas and approaches which can enhance the quality and accelerate the pace of the change process.

#### 3. *Training*

Training opportunities provide an ideal means of obtaining new knowledge, and making new contacts. Training tends, however, to be expensive and time-consuming. The type of continuous training which would be available to curriculum professionals would normally be short-term intensive seminars or workshops. Often opportunities for follow-up are limited or non-existent. In this regard, networking is all the more recommended.

### IV. IMPEDIMENTS TO THE USE OF INFORMATION

The extent to and ways by which information and new knowledge are used by curriculum specialists in the regular course of their profession is an area which needs to be studied in detail, in order to improve the management of information and knowledge. There are a number of challenges relating to the effective provision of information to meet the new demands for curriculum development and reform.

1. In most developing countries, those involved in curriculum development find it hard to obtain adequate up-to-date quality information to carry out their work. Educational documentation centres in ministries and curriculum development centres, if they exist, may be poorly stocked and badly run. Libraries in universities and research centres may have limited resources. Access to the Internet is often still difficult, irregular and requires considerable investment. Pertinent publications listed on the Web are likely not to be available in local libraries, or exist only in English, the principal language for the reporting of research.
2. Even where Internet technology is readily available, it does not yet provide unlimited access to knowledge. Furthermore, even in contexts where information is readily available, there is no guarantee that it will be adequately exploited. Studies into information utilization by educational policy/decision-makers and practitioners cite a number of reasons for this, one being the limited time these professionals have to access, read and assimilate information. They typically have very busy schedules, which means that opportunities for regular, in-depth reading on educational issues, and in particular research findings, are very limited (Anderson, 1992).
3. It is argued that education as a field of academic study is not properly grounded in scientific principles, and has depended on social science disciplines, such as sociology, psychology and philosophy, for its academic base, a practice that has led to the neglect of the study of actual educational phenomena. Despite advances in cognitive psychology, it is felt that much is still not known and misunderstood about the learning process—essential knowledge if students are to be taught to learn how to learn and become lifelong learners (OECD, 2000).
4. Research-based information is felt to be indispensable to improving educational provision. (Reimers, McGinn & Wild, 1995; OECD, 2000). However, educational research has had limited impact on either educational policy making or practice in systems around the world. There are a number of reasons offered to explain this:  
(a) *Irrelevance*: educational research tends to be largely restricted to academic institutions, with limited involvement on the part of decision-makers or practitioners. Much research is not undertaken with the decision-maker or practitioner in mind, but primarily to serve the interests of the researcher and the institution where he/she works. Reimers and McGinn (1998, p. 20) observe that, 'in many countries, much of the educational research is produced in universities and is conceived, funded and carried out in ways that have limited links to potential users, and which do not take into account the perspectives of users in drawing the implications of findings.' The findings often have little direct relevance to curriculum design or classroom practice.

- (b) *Inaccessibility*: research findings tend to be published in academic journals and presented in recondite, technical language (Reimers, McGinn & Wild, 1995). According to one writer, 'researchers often have greater interest and experience in the generation of new knowledge than in its communication to others' (Anderson, 1992, p. 1).
- (c) *Lack of sufficient authority/persuasiveness* (OECD, 2000). The findings of much educational research are inconclusive and do not answer the practical questions being sought by those making decisions about what to teach and how.
- (d) *The inadequacy of the education system itself*, which may make it resistant to or incapable of change (ibid.). This last point is a fundamental issue in the whole process of reform, and not merely related to issues of research use.
5. A further challenge to the accessibility of knowledge about the educational process is that a lot of it tends to be what is termed 'tacit' knowledge. This means that it is not explicit and clearly recorded or codified, allowing for easy transfer, dissemination and integration into professional practice. Much tacit knowledge is of the 'know how' variety. Teachers' knowledge, in particular, is felt to be largely tacit. While some of this knowledge is tacit by nature, some is so because no efforts have been made to document it (OECD, 2000). This has implications for curriculum developers, who need to work closely with teachers in producing and disseminating knowledge about good instructional practice.

#### IV. RESPONDING TO THE CHALLENGES

It is clearly necessary not simply to improve access to information, but to increase opportunities to use and reflect on this information, as well as to create new knowledge, and apply it to the curriculum development process.

##### 1. *Improving the quality and relevance of research*

Hargreaves argues for more systematic research and documenting of good practice in schools, in order to improve the knowledge base available to teachers. This research should be collaborative and rooted in practice, jointly carried out by practitioners and academics (ibid.). Participatory approaches in the production of knowledge through research will promote dialogue, reflection and negotiation, and lead to the growth of organizational learning (Reimers & McGinn, 1998). They will also result in a better understanding of the process of change in various contexts of educational practice (Hargreaves, 1999).

Such a knowledge base would clearly be of great value to curriculum developers, who need to know what works in schools in order to design appropriate programmes. They should be key partners in such research initiatives, which would enable the sharing of human and

technical resources in the research process. Moreover, with school-based curriculum development increasingly advocated as possibly the most effective means of curriculum design, teachers as curriculum designers will need to possess such a source of well-documented knowledge (Kelly, 1999). All parties would have to be trained in how to develop and maintain such collaboration so as to make it genuinely fruitful, with an adequate support structure established.

##### 2. *Improving the dissemination of information*

The issue of dissemination must be central to efforts to improve the use of information in curriculum development. Information needs to be better packaged and marketed, with appropriate exploitation of ICTs. Reimers and McGinn (1995, p. 28) state that, for effective reporting, research information should be *relevant to real problems, practical, useful, credible, understandable and provided in a timely fashion*. State-of-the-art reviews and digests of selected research and outcomes, such as those produced by the ERIC database, are potentially useful ways of selecting and synthesizing research.

Anderson (1992) recommends that a prototype communications strategy be designed by researchers to communicate the results of research and innovation effectively in relation to curriculum reform. She recommends that research teams have a staff member responsible for communicating and also that they should hire a professional writer familiar with educational issues and with the various audiences to prepare reports and brochures disseminating research results. She suggests that, for dissemination to be effective, it should seek to use communication channels that are already familiar to/popular with users, and she advocates use of a constructivist approach to information dissemination, i.e. providing opportunities by potential users for interaction with and application of the knowledge.

Dissemination cannot be effective in itself. Knowledge has to be internalized, reflected on and used in professional practice, as is appropriate. Relevant training and networking structures will assist this process of knowledge transfer (OECD, 2000).

##### 3. *Managing information and knowledge*

OECD argues for a clearly defined knowledge management policy within educational institutions. From the perspective of this paper, this may include curriculum development centres and ministries of education. Knowledge management is defined as 'management of the intellectual capital' of an institution (OECD, 2000, p. 70). Some of the elements considered necessary for managing knowledge include: (a) effective use of networking and of ICTs; (b) defining and establishing a new relationship between educational research and practice that would involve joint production and dissemination of knowledge; and (c) designing an infrastructure to support the process at national, regional and local levels.

Such an infrastructure should provide resources for networking, training, information services and other aspects of the process, and decentralize responsibility to regional and local levels (ibid.).

#### 4. *The information broker's role*

In order to facilitate access to and use of quality information for educational development, the concept of 'information broker' or 'knowledge broker' has emerged. This role could be assumed by individuals working within education or research institutions, or operating as freelance experts, who would assist in bridging the gap between research, decision-making and practice. They would identify and select relevant research, summarize/synthesize the findings in an easily readable style to the targeted users, and make it regularly available to them. They would be able to provide comparative state-of-the-art reviews and analyses of relevant research, and inform and report on the progress of ongoing studies. They should have the ability to assess the validity of research findings and present alternative findings on particular issues.

Information brokers should have the capacity to anticipate information needs. Those working with curriculum developers would need to be well informed about existing curriculum practice and knowledgeable about international as well as local educational trends. One of their functions could be to co-ordinate training seminars to discuss and analyse leading new trends and research findings of relevance to educational practice.

In some cases, the profile of knowledge broker has been seen as that of a policy analyst, a researcher trained to communicate research-based information to the public (Reimers & McGinn, 1998). The report of the International Meeting on Educational Reform and Educational Research (1995), on the other hand, identified the need for such a profile to be developed within the profession of documentation/information workers.

The role of information broker is being increasingly played by national and international institutions. These may be research and development institutions, national or regional information networks, such as ERIC in the United States or the Asian Pacific Programme of Educational Innovation for Development (APEID), or international organizations, such as the IBE.

#### Notes

1. The various requirements for learning to learn include:
  - being motivated to learn throughout life;
  - being skilled at identifying one's own learning needs or knowing how to get help with this task;

- being able to identify the kind of education and training to meet those needs and how it is assessed;
  - being able to acquire a range of meta-cognitive skills—thinking about one's own thinking, learning how to be flexible with learning styles and strategies;
  - being able to think independently and in a range of contexts (work, leisure, home) other than formal educational organizations;
  - learning how to access information and knowledge from the new world of the information and communication technologies (OECD, 2000, p. 74).
2. An important observation of Reimers and McGinn (1998) is that, while the current educational discourse relating to preparation for the job market originated in the developed world to reflect changes in economic production, it is also the driving force for educational reform in the developing world often without research having been carried out to show that such change is really necessary or viable for these countries.

#### References

- Anderson, B. 1992. *Successful curriculum reform: sharing the knowledge with policymakers and practitioners in ways that influence practice*. Boulder, CO, Colorado University.
- Delors, J., et al. 1996. *Learning: the treasure within*. Paris, UNESCO. (Report to UNESCO of the International Commission on Education for the Twenty-first Century.)
- Hargreaves, D. 1999. The knowledge-creating school. *British journal of educational studies* (Oxford, UK), vol. 47, no. 2. p. 122–44.
- Husén, T., et al. 1998. *Education: the complete encyclopaedia—CD-ROM* (version 1.1). Elsevier Science.
- International Bureau of Education; National Institute for Educational Research of Japan. 1995. *International Meeting on Educational Reform and Educational Research: new challenges in linking research, information and decision-making: final report*. Geneva, Switzerland, IBE.
- Kelly, A.V. 1999. *The curriculum: theory and practice*, 4<sup>th</sup> ed. London, Paul Chapman Publishing.
- Organisation for Economic Co-operation and Development. 2000. *Knowledge management in the learning society*. Paris, OECD.
- Reimers, F.; McGinn, N.; Wild, K. 1995. *Confronting future challenges: educational information, research and decision-making*. Paris, UNESCO.
- Reimers, F.; McGinn, N. 1998. *Informed dialogue: using research to shape education policy around the world*. Westport, CT, Praeger.
- Skilbeck, M. 1998. Curriculum renewal. In: Husén, T., et al. *Education: the complete encyclopaedia—CD-ROM*. Elsevier Science.

# Role of communication within the framework of curricular reform

*Liliana Jabif*

## I. INTRODUCTION

Globalization and its implications, as observed in the Delors Report,<sup>1</sup> has not only consequences for the economic dimension of human activity but also for the socio-cultural and ethical dimensions with regard to the growing inter-dependence and inter-relationships between peoples and cultures. The need for human beings to strive towards a deeper understanding amongst themselves has never been greater. The augmentation and reform of school curricula has hence become an ever more relevant preoccupation.

In this context, the training seminar organized by the International Bureau of Education (IBE) and the UNESCO Principal Regional Office for Asia and the Pacific (PROAP) in Bangkok, Thailand, from 12 to 15 December 2000, focused on capacity building in fundamental skills for effective curriculum development.

One of the seminar's objectives was to develop wide-ranging competencies related to a systematic process of curriculum reform, within the perspective of 'learning to learn.' In this framework, a workshop on relevant communication skills to the curriculum development process was organized. The main goal was to discuss, reflect and draw guidelines related to some of these questions: What do we need to communicate? To whom? In which way? The process of the workshop design and implementation will be discussed in this paper.

## II. THE DESIGN STAGE

### 1. *The demand*

Within the broad framework of the seminar, the concrete demand was for the design of a workshop that would provide an opportunity for discussion and analysis of problems linked to the strategies for communicating educational policies in the process of curriculum change.

### 2. *The first step*

To start with, information on shared experiences in similar contexts was collected. In this regard, documents<sup>2</sup> were studied and interviews carried out with key inform-

ants<sup>3</sup> with the aim of understanding the context better and obtaining a deeper appreciation of the details of some of the experiences that had been carried out by IIEP<sup>4</sup> in the framework of the development of communications skills for educational policy-makers.

This preliminary exploration led to a decision to go beyond the case study, which would already provide the participants with a concrete experience, and to make the workshop methodology even more experiential, using the activity to unify the heterogeneous group of participants.

### 3. *The questions*

The process of selecting an appropriate case suitable for adaptation to the didactic objectives of the seminar was indeed a challenging one. It was deemed that the following criteria be taken into account: that the context be chosen as to make the case readily comprehensible to the target audience and thus fully serve the pedagogical ends of the seminar; that the presentation be concise and clear, presenting critical elements of vital aspects of the curriculum reform.

It was therefore decided to construct a case study from a variety of experiences garnered from different countries. A review of newspaper articles was carried out and interviews with key informants undertaken. From this emerged a scenario wherein the development and implementation processes of curriculum reform were characterized by conflicts and tensions. The communication strategy used within and outside of the education system was empirically causing and contributing to these tensions.

### 4. *The definition of thematic areas and methodology*

The thematic areas of the workshop were developed out of the problem situation that in this case represented the 'lessons to be learned'. Once the thematic areas were defined from the empirical evidence, the next step was to design the methodological sequence and the learning activities.

This phase involved taking a number of decisions given the existing relationship between the theme of the workshop and the recipients of the training. Since there is a strong link between communication and culture, the



dilemma was: what activities should be chosen? What level of acceptance would games have with this audience? Would the objective of learning be affected? It was decided to combine the practical exercises with didactic games. These would serve as triggers for generating discussion, while the analysis would take place jointly with the theoretical presentation of those aspects found to call for further development.

### 5. *The expected results*

It was hoped that the workshop would generate a pre-meditated space for reflection and analysis in order to:

- visualize the complex network of variables which affect the processes of change;
- get to know in greater detail the communication strategies which are used in the reform processes in the countries concerned;
- learn if these had generated conflicts and tensions and at what levels, magnitude and range;
- elaborate some general guidelines on communication strategies which should be taken into account in the process of curriculum reform;
- apply this knowledge to develop competence in communication.

## III. CARRYING OUT THE WORKSHOP

The following are the presentation of the sequence of workshop activities:

1. *Objectives were presented to participants, who were informed that by the end of the workshop they would have:*

- reflected upon the importance of communicating policy in curriculum development processes;
- applied and developed the necessary skills for communicating educational processes within a context of change.

2. *Participants' expectations were requested in order to align objectives with their own expectations and to verify if they had been achieved at the end of the session. Their expectations were related to two main problems:*

- the need to discuss and analyze the focal points of the curricular reforms with the teachers *before* implementing the changes, so as to increase understanding, clear doubts and allow for a sense of ownership of the changes that were being envisaged;
- the need to discuss *how* to disseminate information on reforms to teachers, politicians, parents and the wider society.

3. *With the objective of introducing the theme and initiating a discussion in relation to problematic issues at the workshop, the work groups were asked to answer two*

*questions in a word or a phrase.* The first question, 'What does the expression "communicating educational reforms", suggest to you?' evoked the following phrases:

- 'Deliver ideas of changes through participation and co-operation with stakeholders.'
- 'Understanding change.'
- 'Interactive way of bringing about changes in education.'
- 'Sharing experiences.'
- 'Multiplier effects.'

The second question, 'Do we need to build a strategy for communicating educational reforms? Why, for what purpose? To whom, to what audience? If not, why not?' brought forth the following responses:

- 'We need a strategy because it is difficult to communicate reforms, they are wide ranging and we need to transmit and discuss ideas with large audiences. We want to be efficient in communicating change.'
- 'Educational reforms are complex and all actors need to understand the change. We cannot proceed without them. The audiences are parents, teachers, students, administrators, supervisors, communities, mass media, industries, employers.'
- 'We need to communicate reforms because we need a wider acceptance and enhancement of participation of varied stakeholders.'
- 'We need effectiveness in understanding concepts, ideas, rationale, problems and issues as well as effectiveness in the implementation process.'
- 'We need a strategy to ensure that the public will share a common understanding of changes and encourage their co-operation in reform.'
- 'We need to communicate in order to make the direction clear, to help people understand, to get feedback, to mobilize all stakeholders to take an active part and contribute to reforms. To whom? To policy makers, practitioners, each and every one in society.'

4. *The context of the particular secondary education reform and its principal aspects were then explained:*

The reform of secondary education involved certain changes in administration, teacher training and curriculum development, in three main areas, namely, *content*, *strategy*, and *implementation*. With reference to the content of change, the main aspects were that: secondary education was divided into two stages, a basic (first, second, third grade) and a further stage (fourth, fifth, and sixth); instructional hours increased from 3.5 to 5.5 hours a day; number of subjects was decreased, being merged into integrated areas of knowledge. Thus for example, as a result of integrating biology, physics and chemistry into natural science, teachers with knowledge in chemistry had to also teach biology; English became compulsory as a foreign language instead of French and many teachers feared losing their jobs; computer studies was added as a new subject. With reference to the strategy and the implementation of change, expert teams,

from outside the system, were specially hired through the National Board of Education to help plan the reform.

5. *Once the reform and its context were explained, the information obtained from the research was distributed to the work groups. Participants were asked to analyze the texts and respond to the question: 'From the evidence*

*you have, which are the problems that appear to be most relevant?'*

The principal problems cited by the participants were the following:

- lack of information;
- poor communication;
- rumours distorting the communication process.

---

---

#### ***Quotations from press articles and interviews with members of teachers' unions***

- 'This National Board of Education never developed communication strategies with teachers, inspectors and directors (...); the president of the National Board of Education met with Teachers Union only on one occasion, but not to listen to us.'
- 'We see it as extremely difficult to establish a dialogue on the educational reform with the authorities, we speak different languages.'
- 'We demand the educational reform to be stopped at the end of the year and at the same time to have a national debate with the participation of everyone involved.'
- 'It is not possible that teachers learn what is going to happen with the reform only through the media. If there is a reform plan, there has to be at least a written document or a video...'

---

---

#### ***Quotations from press articles and tv interviews with teachers***

- 'Teachers discontent is not due to "resistance to change" as the authorities say.... The problem is that we are not clearly informed about the content of changes.... We see it as a threat to our work security.'
- 'The new curriculum decreases the number of subjects, merging them into integrated areas of knowledge and as a consequence of that, many teachers were left without hours to teach...we are worried about our jobs....,
- 'Even though they say that this is a transitory situation, too many teachers were left without hours of teaching.'
- 'The communication strategy was achieved through informal channels, we must eliminate the rumours and begin a dialogue where all parties can express their opinions'
- 'Authorities take relevant decisions in curriculum development which are communicated through memos'...
- 'In this reform we are not the actors, everything happens without previous agreements...communication works in one direction.'

---

---

#### ***Quotations from press articles and interviews with students***

- 'The National Board of Education stated that they are not willing to continue with the dialogue until we leave the occupied schools... but we want to start debates and workshops in order to know the content of the reform and the counter proposals of the teachers.'
- 'Government officials are the ones who have to take the first step in creating an atmosphere of participation and communication.'
- 'This reform is imposed by international organizations and it is not a result of a national debate with all the parties involved.'
- 'Because we did not receive the whole document, the reform is a kind of Pandora's box: every day we find out something new.'
- 'We are not against the reform, because we do not know what it is about. This is against not having information, against the authoritarian style used to put the reform into practice.'

---

---

#### ***Quotations from press articles and interviews with teachers on TV programmes***

- 'The most serious problem with this reform is the lack of an institutionalized dialogue with the different hierarchies. There cannot be an educational reform without the actors being convinced of what they are doing.'
- 'It is obvious that there are different visions. It is essential to have an organized framework of discussion so that everyone can give his or her opinion. I do not believe this would stop the functioning of the system; on the contrary, it could prevent the conflicts that endanger the effectiveness of the process of change.'

6. The next step was to present the problems that the investigation had revealed and relate them to the problems detected by the participants, identifying the similarities:

- a directive leadership style that could not prevent conflict;
- failure of internal communication process;
- no social marketing programmes were developed 'to sell' the reform;
- leaders did not adapt communication styles according to situations.

7. To begin with, the problem—'a directive leadership style that could not prevent conflict'— was explained and this was related to three simple communication models. Figure 1 was used to introduce the conceptual framework and to relate the three elements available: the empirical material, the theoretical explanation, and the actual experience of the participants.

8. Participants were asked to engage in an activity in order to relate the case to their personal experiences by asking them to think about an innovation they have to communicate. Which of these models would they use? In what sorts of situations? Keeping what purpose in mind? To what kind of audiences? And why?

The participants presented in plenary the results of these experiences. There were many cases where the different countries had experienced problems of communication related to educational policies. Although Laos and Indonesia are working in this area and showed explanatory leaflets on distinct aspects of their curricular reforms, they indicated that much more still needed to be done and the efforts had to be continued in order to inform all sectors of the society.

9. In order to initiate analysis of the problem: 'of failure of internal communication processes' a communication

game was played to demonstrate the distortions and barriers to communication.

With a view to relating the problem to the experiences of the participants, they were asked to carry out the following exercises:

- to think about situations in which they experienced 'distortions' in communication;
- what was the situation? How did it appear? What was the impact? To think about their future work in the curriculum development process. Which are the most important elements they must take into consideration in order to avoid 'distortions'?

The teams related anecdotes of similar situations. They cited problems of distortion due to lack of written communication and those caused by poor interpersonal communication

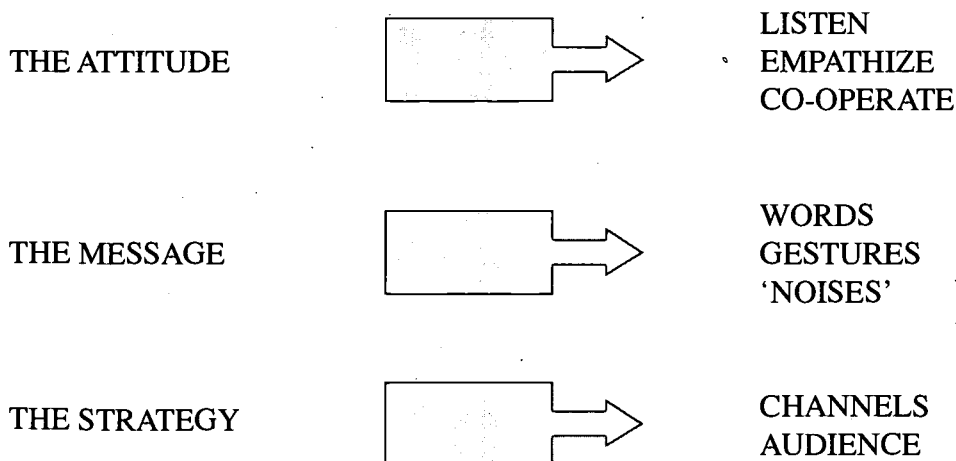
In this regard, they offered some advice as to some measures that could be taken in such situations: to listen empathetically, give and request feedback and use language that is clear to the interlocutor. This last aspect was considered very important. The importance of the careful use of technical language for communicating with non-specialized audiences was also stressed.

10. In the presentation of the problem 'no social marketing programmes were developed "to sell" the reform', participants were asked to do an exercise, responding to the following situation:

They are in a meeting with their team. They are planning the strategies for communicating the new curriculum's main guidelines inside the organization (ministry, district, university, etc.) and outside the organization. What are their recommendations?

The groups chose different cases, objectives and audiences and for each of them presented a 'marketing plan'. It was interesting to note that the media or channels of information that they proposed using depended

FIGURE 1: Three important communication elements



on the characteristics of the country, the region and the resources. Thus, in addition to conventional means of communication, methods such as songs and slogans, taking advantage of sporting and cultural events for dissemination of information, designing of posters, etc., were proposed. From the presentation of cases, a series of recommendations that were deliberated upon are summarized below:

- 'Try to persuade: If you use persuasion, conflicts with teachers, parents and students can be diminished. People who understand the way others think are better persuaders. They try to keep actors informed.'
- 'Consider the characteristics of the audience before sending the message.'
- 'Consider the following aspects, before implementing an innovation: who is our target audience, and what are their needs? What are we trying to accomplish? Is the project we propose clear and comprehensible? Has the target audience clearly understood the explicit benefits?'

11. *To illustrate the problem of leaders not adapting their communication styles to the needs of the situation:* participants were trained in applying the four styles of leadership according to the situational leadership model, which uses the interaction of two variables, relationship and task. Participants were asked to identify different situations in which they had to apply different styles, depending on the circumstances.

12. *They were presented with three important communication elements while working on curriculum development processes:*

- attitudes—listening, empathizing, co-operating;
- message—words, gestures and distortions;
- strategy—audience, channels.

13. *To summarize the main points discussed in the workshop, they were asked to generate a communications policy by doing an activity in which they had to communicate the main guidelines of new curricula to different audiences by planning a strategy in which they had to answer the following questions:*

- Why do we need to communicate?
- To whom?
- How will the message be communicated?
- What would the channel be?

The results of the working groups summarize the main concepts that were arrived at during the workshop:

- 'Educational reforms imply a great number of actors: teachers, pupils, unions, community, parents, administrative and technical staff.'
- 'To establish communicational forms and channels for these audiences is important in order to manage the new policy.'

- 'This transformation implies, among other things: Making the policy explicit, informing very clearly about the purpose of the project, generating consensus, leading and organizing activities, promoting compromises, following, and ensuring others follow the new legal framework.'
- 'The communication process has to be executed in "stages":'

*First stage:* the announcement—the policy is publicly announced. It is transmitted from the education authority. *It is informative, generic and strategic. It is given through mass media channels. It is 'a one direction message'.*

*Second stage:* the internal communication—the message is presented to those actors involved in implementing the policy. The objectives are to inform, to obtain understanding, to orient and guide, to detect needs, to get commitment.

*Third stage:* the social communication—the message is transmitted through mass media (radio, TV, written press, posters), meetings, congresses, etc. to the community. The objective is to inform, consult, get consensus, introduce demands.

*Fourth stage:* the moment of feedback—the objective is to get information about the impact of the message on those who received the information in order to make the necessary adjustments.

#### IV. MAIN CONCLUSIONS

The examination of problems related to communication in a seminar organized for the discussion of relevant aspects of curriculum reform was an interesting innovation that showed the limited analysis and importance that educational managers give to this variable, at the stage of the elaboration of the design and implementation of change.

The case presented, the research undertaken to carry it out and the reaction of the representatives of the countries present at the seminar is a significant example. Although it would be naïve and nearly absurd to suggest that the communication aspect is the determinant factor in the success or failure of a reform, empirical data indicate that poor communication can obstruct, slow down and distort the progress of a project. Nevertheless, it is important to point out that the reforms studied in the process of the elaboration of the case study were successful, that is that in spite of the problems posed, the changes were finally implemented.

Although the 'costs' that had to be paid were high: many actors were excluded from the process and the teams which supported the reform had to invest much time and effort repairing the damages caused by poor communication, the reforms went ahead and today represent an important milestone for those educational systems.



The factors that made this development possible can be linked to specific variables, that is to say those that define each context. The reforms studied took place in a context of administrative and functional transparency, with a total absence of corruption. While the management style of the reform was that of directive leadership, it received great academic approval and strong support from the Prime Minister, as well as additional financial resources.

All things considered, it is important to point out that the success and failure of the reforms and the role that the communication variable plays in them, depends to a great extent on economic, political and socio-cultural aspects which are the factors that in the final analysis, determine the course of events.

It should also be noted that both the expectations of the participants, as well as the objectives of the activity were achieved, as indicated by the presentations and recommendations from the working groups.

The most interesting conclusion can be summed up in the sentence of a participant at the end of the work-

shop: 'we must all be conscious that poor communication can cause a curricular reform to fail. We have the obligation to contribute to making communication clear, to ensure it targets all actors and that appropriate methods and strategies are used which lead to understanding and bring about support and co-operation'.

#### Notes

1. Delors, J., et al. *Learning: the treasure within*. Paris, UNESCO, 1996, p. 22. (Report to UNESCO of the International Commission on Education for the Twenty-first Century.)
2. UNESCO:IBE; India. Ministry of Human Resource Development; Central Board of Secondary Education. *Globalization and living together: the challenges for educational content in Asia*. Geneva, 2000.
3. Director and personnel from IBE.
4. International Institute for Educational Planning.

# Networking for curriculum development and renewal

Isabel Byron

## I. IBE AND PROAP: BUILDING ON NETWORKS FOR DEVELOPMENT

The International Bureau of Education (IBE) and the UNESCO Principal Regional Office for Asia and the Pacific (PROAP) see the promotion of networking as essential to their role and functioning mutually beneficial to themselves and to the countries which they serve. Without direct active links with experts and institutions, they cannot adequately respond to the needs of Member States. In order to fulfil its role as an international centre for capacity building for curriculum change, the IBE needs to benefit from the ideas and expertise of educational professionals in the different regions of the world and to have access to the technical resources of their institutions. PROAP must maintain similarly close working ties with individuals and institutions in the countries of the Asia-Pacific region. At the same time, both the IBE and PROAP desire to make their resources available to relevant institutions in Member States. Networking is arguably the most satisfactory way to achieve this.

Both the IBE and PROAP have considerable experience with the mechanisms and modalities of networking: the IBE, through its International Network for Educational Information (INED),<sup>1</sup> and its close involvement with the establishment of other international networks of educational innovation for development (APEID, CARNEID, NEIDA, EIPDAS);<sup>2</sup> PROAP as the headquarters of APEID, its close links with the South-East Asian Ministers of Education Organization (SEAMEO) Network,<sup>3</sup> and similarly with networks in East Asia. Both institutions see it as essential that their future networking activities in curriculum development in the large and diverse region of Asia learn from and build on the experiences of existing networking structures working in this field, seeking to collaborate with and strengthen them, rather than compete with them.

## II. DEFINING NETWORKS

The New Oxford Shorter English Dictionary defines networks as 'a chain or system of interconnected or intercommunicating things, points or people' (Browne, 1993, p. 1909). Dubbeldam (1996, p. 11) quotes Hanks, 1979, in describing networks as 'a large number of people, groups or institutions, etc., that have a connection with each other and work together as a system'. He later

describes a network as 'the pattern of social contacts of an individual through which she or he can achieve information, support, credits, power and other essentials needed for survival or for improvement of one's position', stressing that 'individual' may be replaced by 'institution' (ibid.). While this short paper is principally concerned with the development of institutional networks, it recognizes the importance of networks which function in a more *ad hoc* manner, comprised of individuals with common interests. A useful definition of an educational network is that given at the World Conference on Education for All (Jomtien, Thailand, 1990): 'An educational network is essentially the interactions among individuals and groups of individuals to share information, and thereby increase the potential for utilization of this information to improve the quality of education'. However, the IBE's and PROAP's vision of networking goes beyond the simple sharing of information.

Networks should ideally develop as systems for support and mutual assistance. Dubbeldam (1996, p. 12) writes: 'Essential to the proper functioning of a network is the participants' belief that they have something worth sharing and that they may call upon the others in the network when a need arises.' Networks provide wonderful opportunities for the sharing of resources: knowledge, ideas, opinions, expertise, technical and sometimes financial capacities. They can reduce problems of isolation of professionals and their institutions, by putting them in contact with persons of like-minded interests and concerns. One writer thus describes networking as 'catalytic to development as it provides for cross-fertilization of ideas for better productivity' (Nyati-Ramahobo, 1996, p. 80). However, their successful functioning depends on the commitment of the members and effective means of, and strategies for, communication.

As Reimers and McGinn, state 'networks are as old as human civilization' (1998, p. 77). In today's world, capacities for networking over long distances and across borders have been revolutionized by the development of increasingly sophisticated communications technologies. In an age of globalization, networking has become an integral aspect of the process of development, essential to the functioning of modern societies. Ideally, collaboration and sharing through networks will permit developing countries to advance by providing them access to the resources of other countries/institutions and enabling them to have a

better understanding of the main trends and developments in specific fields, thus facilitating their adaptation, where desirable and appropriate, to local needs.

However, the relative success and capacities for long-term survival of networks varies considerably. In addition to institutional constraints, the life of networks depends on the motivation and commitment of the individuals comprising their membership. There must be a felt need for starting a network and reasons for keeping it going.

### III. THE STRUCTURE AND FUNCTIONING OF NETWORKS

Networks may be loose and informal or structured and formal. The form they take will depend upon political and cultural factors related to the geographical regions and types of institutions in which they develop. The levels of autonomy of the individuals making up a network will depend on whether they are representing an institution and the degree of freedom they have within it, or whether they are operating independently. Reimers and McGinn (1998) observe that it is easier for individuals to participate autonomously in networks in societies where individualism is a common feature of life, while in societies and organizations dominated by community or collective values, networking is likely to be institution-based. Similarly, Cheng (1996) points out that in societies which are traditionally hierarchical, such as in East Asia, networking, especially autonomous individual networking, is far more uncommon, as the custom is to work within established roles and to remain within one's institutional framework. In such societies, networks, if they develop, are likely to be structured along formal institutional lines, which can hinder their effectiveness.

The way a network operates will depend on whether it is formal or informal and based on individual or institutionalized relations. Dubbeldam (1996) observes that networks of institutions normally define clear objectives and activities, while ones comprised of autonomous individuals may function in an *ad hoc* manner, being kept alive by the interests of the members in being part of a group of like-minded individuals. However, he stresses that even formal networks are heavily dependent on 'informal relations between the individuals in the participating institutions' (p. 15). Komba (1996) suggests that overformalizing of networks may diminish their effectiveness, as it will tend to restrict or suppress individual autonomy and creativity.

In addition to political and cultural influences, economic constraints may make the free flow and sharing of information among individuals and institutions difficult or undesirable. Institutions or individuals wishing to participate in networking may lack the technological and other resources needed to support their active involvement. Possibilities for cross-national networking pose linguistic challenges in a region such as Asia, where English normally has to be used as the lingua franca. This requires competence in a foreign language and adequate resources for translation of written information.

International institutions, such as UNESCO, need to be aware of and understand the factors influencing how

networks develop in different countries and regions, in order to work constructively with them and facilitate greater dissemination and exchange of information and expertise on a truly international scale.

### IV. ISSUES IN NETWORKING FOR CURRICULUM DEVELOPMENT

As indicated in the first section of this article, education networks already exist in the region and their fields of interest touch on many areas relating to curriculum development and change. IBE and PROAP are interested in networking as a means of strengthening capacities among curriculum professionals and the institutions they form a part of. It is for the regions and Member States to decide what form they wish future networking to take — whether they should expand the curriculum development activities of existing networks, or establish a new more specialized structure. Dubbeldam (1996) observes that any institution or individual can be part of more than one network. Areas of interest and objectives of networks may overlap, creating possibilities for inter-relationships—networking among networks. To respond to the demands for improved educational provision, it is now considered essential for institutions involved in education to network both with others in their sector and with sectors outside the education system (OECD, 2000).

Professional networks combine the intellectual and technical resources of member institutions, allowing the sharing of the knowledge, skills and experience of the individuals that work in them. Where they work in partnership with international institutions, such as UNESCO, they allow these organizations to be better informed about and understand national or local concerns, needs and ideas in the network's specific field of competence.

Meetings, conferences and seminars provide the opportunity for establishing interpersonal and institutional contacts, which may become fruitful, long-term relationships. However, curriculum professionals are typically very busy, dealing with challenging situations in their daily working lives, to which they have to return once the brief interlude of a meeting is over. Maintaining professional contacts on a regular basis requires commitment and reciprocity. It is nevertheless to be hoped that through relations formed or strengthened during national, regional or international encounters, the foundations may be laid for developing on-going collaboration through networking. Some of the possibilities this may offer are proposed below. It is equally important that curriculum specialists from the region engage in reflection on the issue, and develop their own ideas and suggestions.

1. Networking provides opportunities for the exchange of a range of types of relevant information, such as:
  - new discoveries about the teaching and learning processes;
  - trends in curriculum development in other countries of the region and in other parts of the world;
  - research findings from local/sub-regional studies which could be of benefit to the rest of the region and the world;

- findings from comparative studies;
- innovative approaches from the region or outside it;
- essential statistical data, socio-cultural data and information on teachers, students, parents, community which have implications for curriculum development, etc.;

As international institutions, the IBE and PROAP may play leading roles in collecting, processing and disseminating information of this type to Member States, but will rely considerably on curriculum professionals in the institutions with which they collaborate to assist them in identifying, obtaining and translating such information.

2. Essentially through e-mail, participants in a network may communicate ideas and information, request assistance, propose contacts, suggest new members, etc. E-mail is also the easiest and cheapest way for the IBE and PROAP to stay in close touch with members. Through e-mail technology, a 'list-serv' can be established leading to the setting up of net fora to debate and reflect on specific themes in curriculum development and reform.
3. In addition to information sharing, networking should foster and generate knowledge production by curriculum specialists from the region. It should create a space for reflection and debate on ways for improving the quality of the curriculum development process, focusing on opportunities for professional development. Relevant areas for research should be proposed by members, and joint and comparative studies at sub-regional or regional level undertaken. In conjunction with IBE and PROAP and national and regional institutions, strategies for the effective dissemination of relevant research should be developed.
4. Networking should permit and encourage the sharing of resources and their more equal distribution within a region comprised of countries of very varied levels of economic development. The IBE and PROAP will put their technological and institutional capacity at the disposal of participants through the development of their websites, databases, documentation collections and overall knowledge bases on the curriculum development process. As international institutions, they can provide valuable links and opportunities for collaboration with curriculum-related institutions and networks in other regions of the world.

## V. CONCLUSION

Networking provides an alternative to the traditionally defined 'top-down' or 'bottom-up' models of educational decision-making. In a networking paradigm, all actors may be seen as collaborators. The challenge is to find ways of enabling all actors to intervene in a clearly articulated and productive manner in the decision-making process. Co-ordinating institutions, such as IBE and PROAP, must assist the member institutions of networks to achieve the means to do this through the provision of technical support and training, through fostering opportunities for exchange and dialogue, and providing guidelines and frameworks for action.

IBE and PROAP can serve as co-ordinators or catalysts in networking, providing an international perspective and possibilities for interaction on an international scale. The IBE ultimately sees its role as the hub of a network of networks, using its international position to link and provide support to national and regional institutions working in the area of curriculum development and reform.

## Notes

1. The INED network was created as a follow-up to the thirty-sixth session of the International Conference on Education (1977) which had as one of its themes: 'The problem of information at the national and international level which is posed by the improvement of educational systems'. It ceased operation in the early 1990s.
2. Asia Pacific Programme of Educational Innovation for Development; Caribbean Network of Educational Innovation for Development; Network of Educational Innovation for Development in Africa; Educational Innovation Programme for Development in Arab States.
3. This comprises a number of regional centres, including INNOTECH (Regional Centre for Educational Innovation and Technology), RECSAM (Regional Centre for Education in Science and Mathematics), RELC (Regional Language Centre), RETRAC (Regional Training Centre), RIHED (Regional Centre for Higher Education and Development), SEAMOLEC (Regional Open Learning Centre), VOCTECH (Regional Centre for Vocational and Technical Education).

## References

- Browne, L., ed. 1993. *The new shorter Oxford English dictionary*. Oxford, UK, Clarendon Press.
- Cheng, K. 1996. Appreciating cultures: educational research and networking in East Asia. In: McGinn, N., ed. *Crossing lines: research and policy networks for developing country education*, p. 119–23. Westport, CT, Praeger.
- Dubbeldam, L. 1996. Networks and institution building. In: McGinn, N., ed. *Crossing lines: research and policy networks for developing country education*, p. 11–18. Westport, CT, Praeger.
- Komba, D. 1996. Problems of networking: the ERNESA experience. In: McGinn, N., ed. *Crossing lines: research and policy networks for developing country education*, p. 87–89. Westport, CT, Praeger.
- Nyati-Ramahobo, L. 1996. The culture of networking in educational research in Eastern and Southern Africa. In: McGinn, N., ed. *Crossing lines: research and policy networks for developing country education*, p. 79–86. Westport, CT, Praeger.
- Organisation for Economic Co-operation and Development. 2000. *Knowledge management in the learning society*. Paris, OECD.
- Reimers, F.; McGinn, N. 1998 *Informed dialogue: using research to shape education policy around the world*. Westport, CT, Praeger.
- Educational Research Network for Eastern and Southern Africa (ERNESA); Northern and European Research Review and Advisory Group (NORRAG); Information Network on Education for Latin America and the Caribbean (REDUC); Southeast Asian Research Review and Advisory Group (SEARRAG). 1990. *From research to action in basic education: the potential of networking and North-South partnership*. p. 4. (Prepared for WCEFA Thematic Round-Table 14. Available from IBE on microfiche: SIRE/02474.)

# PART THREE:

## CURRICULUM CHANGES AND REFORMS IN EAST AND SOUTH-EAST ASIA



# The social context of curricular changes and reforms

*Virginia A. Miralao*

I came to be involved in work relating to curriculum changes and reforms because some colleagues at the Philippine Social Science Council and the Social and Human Sciences Committee of the UNESCO National Commission of the Philippines and myself formed a team to review the social sciences framework and content of textbooks that are currently being used in Philippine elementary and secondary schools. We embarked on this project mainly in response to growing criticisms and complaints about the state of our local textbooks. True enough, our review findings supported many of the complaints.

Among other findings, we found that pedagogically, many textbooks are written in a language and present their material in a manner not appropriate to the ages/development stages of students at various grade levels. Content-wise too, textbooks appear overloaded with facts, data and a variety of information which are neither systematically analyzed nor pooled together to present a coherent view of the topics or lessons at hand. In addition, our textbooks have not been rid of long-standing (class-, urban-, gender- and ethnic-) biases and stereotypes that perpetuate falsehoods and exclusionary or discriminatory practices. These are in addition to some other factual and typographical errors found in the textbooks and to their poor visual designs and layouts.

Since Philippine textbooks are developed following the guidelines and lists of learning competencies prepared by our national education department based on the existing curriculum, the poor state of our textbooks is a reflection of problems in the curriculum itself and the national education system as a whole. One notes that various sectoral reports on the state of Philippine education over the years have called attention to its deteriorating quality. We have many indicators of this, the more telling of which is the poor performance of Filipino students in standardized international and national achievement tests. Other available data further indicate that the country's impressive educational achievements in literacy (over 90%) and school enrolment rates have not been matched by commensurate improvements in the country's state of economic and human development. This situation has brought into question the quality and/or standards of Philippine education and has prompted some analysts to ask the rather embarrassing question:

why, if Filipinos are so smart, is the Philippines so poor?

Problems of educational quality and relevance manifest themselves in different ways in the countries of our region, but in general, there is increasing agreement that such problems are best addressed by changes in the curriculum and its delivery than by simple increases in public investments/expenditures on education. For curricular changes and reforms to effectively address problems of educational quality however, it is important that these are not undertaken piecemeal. As pointed out by Zhou Nanzhao, effective curricular reforms require 'radical, fundamental and comprehensive' changes in our educational views and orientations, as well as in curricular content and in teaching approaches and pedagogies, in addition to still other necessary changes in curriculum planning and implementation processes and in educational management and administration. It is quite clear that the task of pursuing meaningful curriculum reform is a complex undertaking which has been made even more so by today's rapidly changing environment. Available knowledge from the work of education experts and researchers (e.g. as those presented in the 1996 Delors Report on education) now tell us that if we are to improve, update and change our existing curriculum, we cannot rely on the same models/theories that informed our earlier work in education planning and curriculum development and design. From a social scientific standpoint in fact, the need for a fundamental shift in our educational perspectives and policies may constitute the biggest challenge in curriculum change and reform.

Earlier educational/curriculum planning, for example, was heavily oriented towards using education to service the economy and to prepare students for productive and secure employment. In recent decades however, it has become evident that there is no one-to-one correspondence between educational qualifications and today's labour markets. Economic conditions in this new century are expected to become more changeable and uncertain, with many countries likely exhibiting higher rates of un- and underemployment than previously. The increasing reliance of firms and companies on the outsourcing of goods and services, moreover, is encouraging short-term employment contracts rather than permanent ones and which, in turn, is changing the 'working

life' and the meaning of 'career paths' among the youth. Today's labour markets too have become observably globalized, thus complicating the task of using education as a means for improving national economies.

Additionally, it should be pointed out that while earlier educational planning models tended to emphasize education's role in contributing to the economy, education systems themselves are as much the products of prevailing economies. Consequently, in the case of many Third World countries, their poor economies and lack of resources to improve their education system (e.g. to produce textbooks, upgrade teachers' salaries, build more schools, etc.) already reduce the likelihood that they can use education as a mechanism to make their economies grow and become globally competitive. These weaknesses in the education/economy linkage are prompting a reorientation in educational perspectives away from the heavily economic rationale of education in earlier periods. Today, regardless of the state of the economy, the provision of (basic) education is increasingly seen as a fundamental human right to be guaranteed by the state and extended to all. This shift in perspective calls for a re-examination of the educational goals and objectives.

As with the education/economy linkage, there is also a need to rethink the nation-building role of education in the face of globalization and the changing role of the state. In the Philippines for example, the nationalistic fervour and anti-colonial and anti-foreign bent of the curriculum content forged in the 1970s and 1980s now sound increasingly anachronistic, considering that large numbers of Filipino families even among the lower classes and rural communities have members working and/or living abroad. There is thus a need to reconstruct our notions of national identity and pride away from the 'old guard nationalism' that may have been appropriate in the years following Independence.

It is also well to remember that notions about the 'nation-building' role of education may predispose governments to use the education system and the curriculum as instruments of government propaganda to foster obedience, curtail dissent and enlist popular support for the state's own political and socio-economic programmes. And here I am not referring only to so-called authoritarian and communist states, but even to freer democratic states who are not beyond similarly using the curriculum and the education system to promote certain political agendas and interests. Again, we should note that the uncritical acceptance of the nation/state-building function of education is likely to run counter to the human rights and social democracy movements that are expected to gain more acceptance in the twenty-first century.

New data and research on the lives of today's youth offer yet other reasons for re-examining current perspectives and assumptions behind educational planning and curriculum development. In the last two to three decades, various researches show no neat patterns in 'youth to adult transitions' as in the past when such transitions typically involved a sequence of going to school

and finishing some basic schooling, followed by getting a job and then by getting married and beginning one's own family. At present, many of the youth are staying longer in school (with not a few seeking different kinds of training after the compulsory level), although many too are combining part-time study with part-time work. It is also no longer uncommon for the youth to drop out of school for various reasons and to resume schooling or educational training at a later point or at other periods in their lives. On-going changes in youth cultures and lifestyles suggest that it is unrealistic to plan school programmes and curricula around the same youth-to-adult transition patterns of earlier generations. There is in fact a need to diversify our educational programmes and curricula if these are to remain relevant to the needs and aspirations of the youth and if we are to adapt the education system to today's changed socio-cultural conditions.

Finally, there are several other changes occurring in various fronts—unprecedented advances in science and technology, new studies on learning processes and human capacities, new pedagogies and so forth—which similarly call for changes in our educational/curriculum models and perspectives. These changes and developments invite us to be innovative and to go beyond the content-heavy and skills-based framework that guided earlier curriculum planning and development. We are, I think, most fortunate at this point to have in the Delors Report, with its exposition on 'education for life' and its four pillars of learning (to know, to be, to do and to live with others), a most useful guide for charting new directions in education and in our school curriculum.

The Delors Report invites us to refocus our educational efforts towards enhancing personal growth and development (and away from an overemphasis on producing a trained/skilled labour force and nationalists for the country) and providing learners with a sense of rootedness or mooring so that they can 'soar above the storm' so to speak and not be caught by the flurry of changes, even as they are able to seize the new opportunities presented by unfolding social and technological developments. These kinds of 'life-skills' that allow learners to be anchored while adapting flexibly to changes in their wider environments do not conform neatly with the usual categorization of learning skills and competencies (e.g. cognitive, affective, psychomotor, etc.) but require new ways of conceptualizing learning behaviours, processes and outcomes.

But although many of us recognize and appreciate the need for changes in our educational perspectives, we are also keenly aware of the many barriers to shifting our paradigms in educational planning and in pursuing needed curricular reforms. Among the problems and barriers that we face are a shortage of resources for systematically undertaking educational and curricular reforms, and other political and bureaucratic tensions and resistances that usually accompany the introduction of change. Let each of us dare to innovate and exhibit the will to change.

# Synthesis of country reports and general trends and needs

Virginia A. Miralao and Lucille C. Gregorio

## I. INTRODUCTION

A Training Seminar on Capacity-Building for Curriculum Specialists from East and South-East Asia was organized in Bangkok, as a collaborative activity between the International Bureau of Education (IBE) and UNESCO-PROAP. This was hosted by the Ministry of Education Thailand, from 12 to 16 December 2000. The seminar was focused on capacity-building in fundamental skills for effective curriculum development and reform, with participants from eleven countries and one SEAMEO Centre.

To allow for informed exchange within the regional context, participants were requested to prepare written reports on their country's recent curriculum reforms, identifying the main elements and stages in the reform process. The participants were provided with guidelines for the preparation of their country presentations.

## II. STRUCTURE OF THE COUNTRY REPORTS

The participants were requested to structure their reports, according to the following points:

1. Present the main organizations and mechanisms involved in the process of adapting curricula in the respective countries.
2. Indicate the particular philosophy(ies) or principles of education/curriculum development which inform the curriculum design and reform process in the respective countries. Outline the principal new content areas and teaching/learning methodologies introduced in recent reforms. Indicate whether any of the principal concepts of learning outlines in the Delors Report were used in the design and formulation of recent reforms.
3. Discuss the main problems faced by curriculum specialists in the country during the following three steps of curriculum reform: (i) design, (ii) implementation, and (iii) follow-up of the process. At the same time indicate the strengths and successful aspects of the reform process.

Based on the above guidelines, participants prepared their written country reports and presented the highlights

to the seminar. These are presented here based on sub-regional groupings: East Asia sub-region; South-East Asia sub-region; and the Mekong sub-region.

## III. SYNTHESIS OF COUNTRY REPORTS

### 1. East Asia sub-region

#### *China*

Curriculum reform in China is based on the policy of quality improvement at all levels derived from two policy documents 'The Action Scheme for Invigorating Education towards the Twenty-First Century' and 'Decision on the Deepening of Education, Reform and the Full Promotion of Quality Education'. The focus is modernization, the world and the future with the aim of preparing the younger generation with appropriate morality, intellectual accomplishments, awareness of one's responsibility towards oneself and the nation, independent personalities and lifelong learning. Guidelines for the curricular reform provide the direction, principles, objectives, policies and strategies of the curriculum while the National Curriculum Standards set the minimum requirement for the curricular content. These two documents provide the basis of material development that follows.

The management of the reform is a shared responsibility by the Ministry of Education and the local education authority. The development of textbooks is given to various professional institutions. Between 2000 and 2005, the curriculum reform will be experimented and modified before full implementation – between 2005 and 2010.

#### *Japan*

Japan's curriculum reform is centred around setting National Curriculum Standards based on the concept of equal educational opportunities for all. The basic philosophy of the standard is the balanced development of the child, who can think wisely and creatively and contribute to societies, equipping them to cope with change, and increased awareness as a member of the international community, as well as encourage each school to develop its own personality. Major changes brought by the new curriculum standards are: (i) The introduction of 'Life



Environment Studies' which combines social studies and science at the first two levels of primary schooling; (ii) periods for integrated study; (iii) reduction of teaching hours in line with the policy of five-day school week system. The new standard will be implemented in 2002 allowing three years for the preparation of teachers and development of materials. Implementation of the new standards will be followed by nationwide survey on student achievement in certain subjects, as practised with previous national curriculum standards.

One problem faced by curriculum specialists at the design stage is determining the scope of each subject due to the reduction of time allotted.

### *Mongolia*

Mongolia undertook its curriculum reform in 1998, following a directive from the Ministry of Education, Culture and Science. The curriculum, outlined in the 'Curriculum Plan for General Secondary School', has two components, i.e. 'core' and 'optional'. The core curriculum is the national standard to be followed by all schools and accounts for 80 % of total time. The 'optional' component provides an organizational standard and is intended to meet the needs of the schools. The Center of Academic Curriculum and Teaching at the School of Educational Development plays a significant role in defining teaching methods.

The main aim of the curriculum is to provide knowledge, skills, cultural values to students as well as to develop individuals as responsible citizens. The development of the Mongolian curriculum is based on the spiral model, increasing in intensity as one moves up the grades. A big percentage of time is allocated to Humanistic Science at all levels. Computer education is integrated into mathematics.

### *Republic of Korea*

Korea is undertaking its seventh curriculum reform based on the framework provided by 'The Presidential Commission of the Educational Reform' affecting all levels of schooling. It has a national curriculum, centrally prepared, providing the general framework, subject curricula, materials as well as guidelines for implementation. It is mandatory for all schools to use. A salient feature of the new curriculum is the differentiated curriculum with different learning content for different groups of students based on academic ability. Another feature is the 30% reduction in curriculum content and the introduction of Information and Communication Technology (ICT) at the secondary level. Superintendents at municipal and provincial levels oversee the curriculum implementation at the local level to ensure local needs are met. Schools prepare their own implementation plan in accordance with the guidelines of the national curriculum and that of the metropolitan and provincial education authorities. There are problems at both the design and implementation stages. Those at the design stage include the inability of a centralized

curriculum to cater to differing local educational needs, the lack of time to undertake research resulting in low level relevance to school needs and strong pressure of interest groups over subject curriculum. Problems at the implementation stage include resistance to change among teachers, lack of teachers' ability to teach the new curricula and lack of financial resources and facilities.

## **2. South-East Asia sub-region**

### *Indonesia*

Curriculum development and reform in Indonesia are guided by the 1999 State Guidelines which emphasize the importance of a diversified curriculum to serve a diverse range of pupil abilities, available learning facilities and regional cultures. The 1999 State Guidelines lay down the 'general principles' for curriculum reform while the Ministry of National Education assumes responsibility for education policy. The Indonesian education system used to be highly centralized but this is now being decentralized with the increasing transfer of authority and responsibilities from central- to district-level bodies. Under the decentralized system, the central-level Ministry of National Education maintains the important role of ensuring the functioning of public services and the consistency of standards on curriculum design and implementation.

The major challenges of curriculum reform in the new millenium include those posed by the ongoing decentralization process; the impact of the Asian economic crisis; other changes in labour market, skills, and knowledge demands as a result of advances in information and communication technology and globalization processes; and other public/political considerations aimed at addressing the uneven development of the country's regions, and popular clamour for increased choices in educational programmes and for parental / student freedom in choosing schools and educational programmes.

Curriculum reforms thus are directed to the foregoing challenges and aim to contribute to the goals of making the national economy more efficient and competitive, and Indonesian society more open and democratic and more responsive to regional cultural differences and local needs.

Indonesia's curriculum framework for the new millenium envisions the development of pupils who are healthy, independent and culturally aware, with good moral conduct and work ethics, are knowledgeable and can master technology, and show a love of their country. Curriculum development in the foreseeable future therefore is expected to become more diversified to accommodate student, environment, cultural and local differences; provide the national standards for academic and skills achievements as well as for the formation of social/personal values and morals; be flexible and relevant to current changes and future developments; integrate the four pillars of learning as proposed by the Delors Report; and enhance the participation of

communities and schools in educational programmes and policy decisions.

### *Philippines*

The Philippines is in the midst of undertaking curricular reforms for secondary education. The reform initiative is contained in the development plan for the 'Twenty-first Century Secondary Education Curriculum' (T-SEC) launched in 1999.

The reform focuses on a review of the Philippine Secondary Schools Learning Competencies (PSSLC) and hopes to address issues pertaining to the overloading of curriculum content, and the need to, among others, integrate the disciplines, achieve a better balance between general and specialized education, and rationalize elective offerings.

Core study groups have been formed to work on the planned curricular reforms following the conduct of multi-sectional consultations and discussions. Results and recommendations are expected to be presented in plenary sessions with the Secretary and concerned offices of the Department of Education, Culture and Sports (DECS) which will formulate the new vision and mission, and the subjects and programme objectives of the curriculum plan. These activities are to be followed by various 'writeshops' to refine learning competencies, curriculum guides and the development of instructional materials. Several types of trainers' and teachers' training are also being planned in support of the new curriculum. Finally, a system of monitoring and evaluation is being set up to ensure ways of assessing both the processes and outcomes of the planned curriculum reforms.

### *Malaysia*

The Education Act of 1996 defines the philosophy, goals and objectives of Malaysia's national curriculum. The national curriculum is developed centrally within the Ministry of Education which maintains three main departments (the Curriculum Development Centre, the Department of Technical and Vocational Education and the Department of Religious and Moral Education) responsible for curriculum design and development, and a number of other units/divisions (Textbooks Division, Teacher Education, etc.), the directors of which comprise the Central Curriculum Committee headed by the Director-General of Education. Curricular programmes which are approved by this central committee are then discussed by the Curriculum Implementation Committee, comprised of the directors of education of Malaysia's fourteen states and Education Ministry representatives who discuss the final points bearing on the implementation of the curriculum.

Curriculum development, reform and revisions follow a cyclical model beginning with a needs analysis, followed by planning, implementation, evaluation and then back to needs assessment. Changes in the curriculum may begin with a policy directive from policy makers, or derive from weaknesses found in the existing curriculum or from observations in world trends or from public opinion.

A curricular revision was undertaken in 1996 to allow Malaysia to incorporate new elements in its curriculum design framework. The new elements draw from emerging knowledge and insights derived from the concepts of multiple intelligences and emotional intelligence, the Four Pillars of Learning in the Delors Report; developments in ICT and the country's move towards developing a K- (knowledge) economy. These new elements are reflected both in curriculum content and in teaching and learning approaches.

The process of curriculum formulation and reform is not without its issues and problems. Among other challenges, curriculum developers in Malaysia have to balance breadth and depth in determining the scope of the curriculum, and they also have to contend with differing school environments, teachers' and other forms of resistance to change, and other weaknesses and inconsistencies in the education system and structures. Nonetheless, the participation of different groups and stakeholders in the planning and implementation of curriculum changes ensures some level of co-ordination in the conduct of curriculum reforms.

### **3. The Mekong sub-region**

#### *Cambodia*

The educational reforms being implemented in Cambodia are all geared towards complementing its socio-economic rehabilitation plans. The Ministry of Education, Youth and Sports (MOEYS) has drawn up nineteen programmes and seventy-two priority action plans which includes prioritizing the reforms on curriculum, textbook development and the general education. These would be implemented through the education system development committees which were formed primarily for this purpose.

Values such as co-operation, environmental concern, love of country, independence, respect for human rights and diversity, etc., are being taught to and developed in the students to make them responsive to the needs of the country in terms of its social, political and economic aspects. General education goals provide the development of necessary knowledge, skills, and experiences for Cambodians to gain the tools that would enable them to function as responsible and thinking citizens. The approach taken in designing the curriculum is content/topic-based and competency-based.

The new curriculum took effect in 1996, yet the whole education system is still reeling from old problems and issues, such as poor qualifications of current teachers or the lack of capable teachers, classroom shortages that have caused student overcrowding in classrooms, and the passive and non-creative attitude of teachers and students.

#### *People's Democratic Republic of Lao*

The Ministry of Education established the National Research Institute for Educational Sciences (NRIES) to

be responsible for the development of the general education curriculum, compilation of textbooks and teacher's manuals, design of prototype of teaching and learning materials for general education, and the provision of teacher training. The general education goal is to equip Lao citizens with the knowledge and skills that would ensure their active participation in family, economic, social and cultural life. It also aims to inculcate a moral and patriotic sense in the students and to foster a well-rounded education system that would seek to be at par with international standards through educational innovations and the use of technology.

The present curriculum, a product of the educational reforms adopted in 1991, came in the light of the socio-economic transformation which the country underwent from having a centrally planned economy to assuming a liberal market system. So aside from the goals stated above, this curriculum also encourages internationalism, combination of theoretical study with practical activities, integration of political awareness and juridical awareness, and the combination of modern world education with the best of the country's traditional culture. It identifies five educational pillars: moral, intellectual, labour, physical and aesthetic.

In terms of teaching methodologies, various methods and techniques are encouraged, such as use of brainstorming, role playing, games, panel discussion, debates, case study, etc. The employment of language encounter techniques has improved and sped up the acquisition of language skills by children from ethnic minority backgrounds who speak other languages than Lao. Teacher-training continues to be carried out and monitored. Through the use of different evaluation tools in assessing the quality of education—both in terms of the teachers and the students—the effectiveness of textbooks and teacher's manuals being used and the teacher-training workshops being held, the NRIES tries to gauge the effectiveness of their programmes and recent evaluation findings show satisfactory achievements with regard to the curriculum's relevance and its contribution to the improvement of learning performance and quality of education. According to this recent educational evaluation, the current curriculum reflects the national identity of the Lao people, their cultural diversity, modernity, and openness to the international community.

Yet some problems remain in the design, implementation and follow-up on the curriculum. Regarding the design, the curriculum is insufficient in adapting to the specific needs of students from various ethnic, linguistic and cultural backgrounds. Relatedly, the teaching aids and instructional materials and other classroom and school facilities to support these needs are lacking and have not been adequately addressed. Despite the introduction of new teaching/learning methods, teachers continue to teach obsolete conceptual structure using old methods.

#### *Thailand*

Thailand's National Education Act of 1999 prescribes that curriculum development be guided by the

'Conceptual Framework for Basic Education Curriculum' which contains information on the rationale for curriculum development, the characteristics of the basic education curriculum, its contents, and guidelines on education curriculum management.

Ongoing socio-economic and global changes require that the basic education curriculum be continuously revised and updated. Other than changes in the global economy and the advances in science and technology, Thai society itself has undergone dramatic changes in its demographic, socio-cultural, economic, environmental and political characteristics which also now require new adjustments in the national curriculum and educational system. Recent assessments indicate that the curriculum offered little flexibility in content to meet the varying needs and conditions of localities. It also provided inadequate learning time for necessary basic courses (e.g. as for science and math, language, etc.), and did not allow for the satisfactory integration of teaching and learning processes. In general, Thai students were assessed as lacking the kinds of knowledge and abilities necessary for seeking further knowledge and future living.

The foregoing limitations of Thai education were some of the considerations that went into the formulation of the 1999 National Education Act and the Conceptual Framework for Basic Education Curriculum. Current reforms guided by these policy documents therefore aim to improve Thai education by, among others, making the curriculum more flexible to suit specific circumstances at local levels; more diversified in terms of its contents and programmes to reach and meet the needs of different groups of learners and develop their potentials; and more decentralized in terms of administration and management to allow the participation of schools, parents, local communities and various sectors and stakeholders in curriculum development and the education system. Current reforms are also taking into account the new knowledge and information that have arisen in the areas of curriculum standards, subject matters and contents, learning approaches and pedagogy and the basic learning principles advocated in the Delors Report.

#### *Viet Nam*

In 1998, the Education Law was approved by the National Assembly which clearly defined the objectives, contents and methods of general education and institutionalization of curriculum and textbooks in the new development period of the country. This is the fourth curriculum reform following those carried out in 1950, 1956 and 1981. It set a vision for the development of the country's human resources until 2020 and is oriented towards striking a balance and complementation in the formulation of the curriculum contents for the primary and secondary education, as well as vocational education to equip the citizens with the necessary skills and competences for Viet Nam's industrialization and modernization. It sought to have a rationalized textbook and cur-

riculum contents that would promote learning absorption at a pace adapted to the student's capacity.

Already expected to happen between 2000 to 2005 is the wrapping up of the pilot testing of the proposed textbooks and curriculum contents and even teachers' training curriculum so as to finalize suggestions. A phased and gradual implementation of this new curriculum will be done accordingly in the primary and secondary education from 2002 to 2007. Several activities to ensure achievement of these goals have also been outlined.

#### IV. REGIONAL TRENDS AND NEEDS

The regional trends and needs identified from the country reports synthesized above are presented by sub-region, because of the vast diversity of the Asian region, in terms of culture, language, geography, socio-political conditions, economic dimensions, etc.

##### 1. *East Asia sub-region*

###### *Trends*

- All four countries of the region—China, Republic of Korea, Japan and Mongolia—are at the stage of curriculum reforms, which began in the late nineties (1997–95) and planned for implementation beginning 2000 (Korea), 2001 (Mongolia) and 2002 (China/Japan).
- All countries have a national curriculum, centrally prepared, but allowing for adaptation at the school level. The curriculum consists of core subjects to be studied by all and electives at the secondary level.
- The curricular reforms focus on quality improvement, emphasizing the overall development of children, who are able to learn and think, are creative, who can play as effective members of society and be proud of their national culture. In terms of curricular content, Japan and Korea have made moves to reduce curriculum content by about 30%. However, there are also moves to introduce new subjects. Japan, for example, has introduced 'periods of integration' whereby children are allowed to study things of their choice, as an attempt to reduce academic pressure. All countries are at the stage of introducing ICT in the classroom.
- Although there is no explicit statement on the Four Pillars of Education as a principle in their curricular reform, elements of the four pillars are manifested in the countries as single subjects as well as integrated across the curriculum.

###### *Needs*

The needs expressed by countries of the region pertain to the following:

- Ways of designing an integrated curriculum;
- Addressing the issue of relevance;
- Balancing an academic with a pragmatic curriculum;
- Teaching techniques in the application of IT/ICT in the classroom;

- Ways of involving the community in the development of the curriculum;
- Ways of effectively communicating with stakeholders so that the curriculum is well understood;
- Ways of convincing parents of the intrinsic value of education and the benefits of the new curriculum and reduce the pressure from examinations.

##### 2. *South-East Asia sub-region*

###### *Trends*

- The three countries in the region (Indonesia, Malaysia and the Philippines) are all in the process of introducing ICT in the school curriculum.
- The countries are placing renewed emphasis on the principle of 'learning to live together' in their values-moral education programmes in response to continuing challenges and threats to social cohesion, peace and national unity.
- All countries have moved to decentralize certain aspects or processes of curriculum development, implementation and administration. Central or national level authorities continue to be responsible for general policies and basic guidelines on the curriculum and for setting national standards for educational quality; while school units, parents, teachers and local communities are encouraged to participate actively in the operationalization and implementation of the curriculum.
- To ensure effective curriculum delivery, increasingly more consultations are being held between and among curriculum developers and implementers.

###### *Needs*

- The countries report a common need for teacher training on their new curriculum and curriculum reforms in order to translate these effectively into practice.
- They also need to reform their existing pre-service training programmes in light of the new changes and elements introduced in the curriculum.
- There is also a need to reform or revise existing national education laws and policies to make these consistent with the new changes in the curriculum.
- More work needs to be done to customize educational programmes in different schools and at different levels to meet varying learners' needs.

##### 3. *Mekong sub-region*

###### *Trends*

- Curricular reforms in the four countries of the Mekong sub-region (Thailand, Viet Nam, Cambodia and Laos) follow closely the elements and spirit of the Delors Report.
- The school curricula in all countries are centrally planned but allow for flexibility to accommodate local conditions.
- All countries are conscious of improving the quality of their education systems and programmes and are



setting up new standards and benchmarks to note improvements in educational quality and performance.

- Education for employment and contributing to the improvement of the national economy constitute a basic educational thrust/goal in the countries of the sub-region.
- There is also a serious move to democratize access to education in the sub-region. Viet Nam and Laos plan to increase their years of free and compulsory education from 5 to 8 years; whereas in Thailand and Cambodia, free and compulsory education stand at 9 years.
- The curricula in all four countries also emphasize the propagation of a national identity.
- All countries are active in generating popular support for education and ongoing curricular reforms.

#### *Needs*

- Ways of designing an integrated curriculum incorporating the 'Four Pillars of Learning'.

- Addressing the issue of quality and relevance.
- Ways of involving the community in the development of the curriculum.
- Continuous teacher training on their new curriculum and curriculum reforms in order to translate these effectively into practice.
- Reform their existing pre-service training programmes in light of the new changes and elements introduced in the curriculum.

#### V. CONCLUSION

With the information above, the participating countries will be undertaking a detailed 'Situation Analysis of the Basic Education Curriculum' utilizing the framework and guidelines agreed upon. A documentation of eleven country studies and one regional report will be published at a later date.



## ANNEX I:

### LIST OF PARTICIPANTS AND RESOURCE PERSONS

#### *Cambodia*

Ms. Ton Sa Im  
Director  
Pedagogical Research Department  
Ministry of Education, Youth and Sport  
Phnom Penh  
Tel: (855) 23 211409, (855) 12 869458  
E-mail: prd@camnet.com.kh

#### *China*

Mr. Qiao Yuquan  
Basic Education Department  
Ministry of Education  
C/o Chinese National Commission for UNESCO  
37 Damucang Hutong, Xidan  
Beijing, 100816  
Tel/Fax: (86) 10 66096779  
E-mail: yuquanq66@sohu.com

#### *Indonesia*

Ms. Ella Yulaelawati  
Head  
Curriculum Division of Primary School  
Office of Research and Development  
Ministry of National Education  
Jalan Jenderal Sudirman – Senayan  
Jakarta 10270  
Tel: (62 21) 51725031  
Fax: (62 21) 5721245, 34834862  
E-mail: yulaela@cbn.net.id

#### *Japan*

Mr. Shigeo Yoshikawa  
Senior Curriculum Specialist (Arithmetic)  
Elementary School Division  
Elementary and Secondary Education Bureau  
Ministry of Education, Science, Sports and Culture  
Tokyo, Japan  
Tel: (81 3) 35814009  
Fax: (81 3) 35921194  
E-mail: shigeo@monbu.go.jp

#### *Lao PDR*

Mr. Khampay Sisavanh  
Director  
National Research Institute for Education Sciences  
Ministry of Education  
Mahosot Street, Vientiane  
Tel./Fax: (856 21) 212026  
E-mail: nries@laotel.com

#### *Malaysia*

Ms. Sharifah Maimunah  
Director, Curriculum Development Centre  
Ministry of Education  
Persiaran Duta Off Jalan Duta  
50604 Kuala Lumpur  
Tel: (03)62011522, 62010126  
Fax: (03)62010186, 62031614  
E-mail: sharifahmsz@ppk.moe.gov.my

#### *Mongolia*

Mr. Dashjamts Tuvshintugs  
Curriculum Specialist  
Non-Formal Education Centre, MOSTEC  
C/o Mongolian National Commission for UNESCO  
Ministry of External Relations  
Ulaanbaatar  
Tel: (976 11) 311022  
Fax: (976 11) 329344  
E-mail: nfec@magicnet.mn

#### *Philippines*

Ms. Eugenia Moraleda  
Director, Curriculum Development Centre  
Department of Education, Culture and Sports  
UL Complex, Meralco Avenue  
Pasig City  
Tel: (63 2) 6337242  
Fax: (63 2) 6365175/6365172

#### *Republic of Korea*

Ms. Nan-Sim Cho  
Director General, Textbook Research Centre  
Korea Institute of Curriculum & Evaluation  
25-1 Samchung-dong  
Jongro-gu  
Seoul 110-230  
Tel: (82 2) 37043541  
Fax: (82 2) 37043580  
E-mail: nscho@kice.re.kr

#### *Viet Nam*

Mr. Do Dinh Hoan  
Director  
Centre of Content and Method of Teaching for General  
Education  
National Institute for Education and Science  
101 Tran Hung Dao Street, Hanoi  
Tel: (84 4) 9423491  
Fax: (84 4) 8221521  
E-mail: hoan\_ccd@hn.vnn.vn

## **Thailand**

Mr. Chaub Leechor  
Director, Office of Education Assessment and Testing  
Service  
Department of Curriculum and Instruction Development  
Ministry of Education,  
Bangkok

Mrs. Mallika Nitayaphorn  
Director, Guidance Centre  
Department of Curriculum and Instruction Development  
Ministry of Education, Bangkok  
Tel: (66 2) 3902330  
Fax: (66 2) 3915013  
E-mail: [mallinit@emisc.moe.go.th](mailto:mallinit@emisc.moe.go.th)

Ms. Parinya Ritcharoen  
Educational Officer  
Book Development Centre  
Department of Curriculum and Instruction Development  
Ministry of Education  
Bangkok

Mr. Sophon Somdee  
Curriculum Developer  
Department of Curriculum and Instruction Development  
Ministry of Education  
Bangkok

Ms. Chantra Tantipong  
Curriculum Developer  
Department of Curriculum and Instruction Development  
Ministry of Education,  
Bangkok  
Tel: (662) 3910055, ext 402, 403  
E-mail: [chantrat83@hotmail.com](mailto:chantrat83@hotmail.com)

Ms. Watanaporn Rangubtook  
Supervisor, Department of General Education  
Ministry of Education  
Bangkok

Mrs. Patcharee Sawangsup  
Supervisor  
Department of Vocational Education  
Ministry of Education  
Bangkok  
Tel: (66 2) 2815555  
Fax: (66 2) 2817166

Ms. Aksara Prasitsilp  
Supervisor  
Office of the Private Education Commission  
Ministry of Education  
Bangkok  
Tel: (66 2) 2823184, 6285067  
Fax: (66 2) 2823783

Mr. Pirach Susansuk  
Supervisor  
Office of the National Primary Education Commission  
Ministry of Education  
Bangkok

Mrs. Yawarat Tusgate  
Supervisor, Bureau of Educational Standard  
Office of Rajabhat Institutes Council  
Ministry of Education  
Bangkok  
Tel/Fax: (66 2) 2813905, 2816643

Mrs. Pornnipha Limpaphayom  
Secretary-General  
Thai National Commission for UNESCO  
Ministry of Education  
Bangkok  
Tel: (66 2) 6285612

Ms. Suchitra Chitranukroh  
Deputy Secretary-General  
Thai National Commission for UNESCO  
Ministry of Education  
Bangkok  
Tel: (66 2) 6285646-8  
Fax: (66 2) 2810953

Ms. Duriya Amatavivat  
Thai National Commission for UNESCO  
Ministry of Education  
Bangkok  
Tel: (662) 6285646-8  
Fax: (662) 2810953

## **RECSAM**

Mr. Tan Khun  
Director  
SEAMEO Regional Centre for Education  
in Science and Mathematics  
Glugor,  
Penang  
Malaysia  
Tel: (60 4) 6583266-7  
Fax: (60 4) 6572541  
E-mail: [director@recsam.edu.my](mailto:director@recsam.edu.my)

## **Resource persons**

Ms. Liliana Jabif  
International Bureau of Education  
Case postale 199  
1211 Geneva 20  
Switzerland  
Tel: (41 22) 9177800  
Fax: (41 22) 9177801

Ms. Virginia Miralao  
Secretary General  
Association of Asian Social Science Councils  
(ASSREC)  
P.O. Box 205, UP Post Office  
Diliman, Quezon City  
Philippines  
Tel: (63 2) 9229621  
Fax: (63 2) 9244178  
E-mail: [pssc@skynet.net](mailto:pssc@skynet.net)

Ms. Cecilia Braslavsky  
Director  
International Bureau of Education  
Case postale 199  
1211 Geneva 20  
Switzerland  
Tel: (41 22) 9177800  
Fax: (41 22) 9177801  
E-mail: [c.braslavsky@ibe.unesco.org](mailto:c.braslavsky@ibe.unesco.org)

Ms. Isabel Byron  
Assistant Programme Specialist  
International Bureau of Education  
Case postale 199  
1211 Geneva 20  
Switzerland  
Tel: (41 22) 9177800  
Fax: (41 22) 9177801  
E-mail: [i.byron@ibe.unesco.org](mailto:i.byron@ibe.unesco.org)

Mr. Zhou Nanzhao,  
Director a.i.  
Acting Chief of ACEID  
UNESCO Principal Regional Office for Asia and the  
Pacific  
920 Sukhumvit Road,  
Bangkok, Thailand  
Tel: (66 2) 3910577  
Fax: (66 2) 3910866  
E-mail: [n.zhou@unesco-proap.org](mailto:n.zhou@unesco-proap.org)

Ms. Lucille C. Gregorio  
Specialist in Science and Technology Education  
UNESCO Principal Regional Office for Asia and the  
Pacific  
920 Sukhumvit Road,  
Bangkok  
Thailand  
Tel: (66 2) 3910577  
Fax: (66 2) 3910866  
E-mail: [lc.gregorio@unesco-proap.org](mailto:lc.gregorio@unesco-proap.org)

*Secretarial and administrative support*

Mrs. Amporn Ratanavipak  
UNESCO Principal Regional Office for Asia Pacific  
(PROAP)  
920 Sukhumvit Road,  
Bangkok 10110  
Thailand  
Tel: (662) 391-0577 (Ext. 318)  
E-mail: [r.amporn@unesco-proap.org](mailto:r.amporn@unesco-proap.org)

## ANNEX II: INFORMATION NOTE

UNESCO's International Bureau of Education (IBE) and the UNESCO's Principal Regional Office for Asia and the Pacific (PROAP) are organizing, with the support of the Ministry of Education, Thailand, a sub-regional seminar for curriculum specialists from countries of East and South East Asia. The seminar will focus on capacity building in fundamental skills for effective curriculum development and reform and will be held in Bangkok from 12-16 December 2000.

### BACKGROUND

The South-East and East Asia region is faced with numerous challenges to the provision of quality basic education to meet the rapidly changing needs of its large population. Recent economic upheavals influenced by an increasingly globalized economy, rapid advances in science and technology, immense social and cultural changes, have all led to the need for innovative reforms and renewal of primary and secondary education curricula. Under the present social and economic pressures, education policy-makers and curriculum developers face the crucial task of defining new contents of education that reflect the knowledge and skills necessary for individuals' personal growth, their functioning in an increasingly complex society and their integration into the world of work.

While reforms to address these challenges have already been taking place for a number of years in the member countries of the East and South-East Asian region, it is recognized that they have so far been inadequate to reply to the changing needs of the countries. Furthermore, reforms are most of the time not implemented effectively. Where formal educational institutions do succeed in keeping up to date with the advances in knowledge, information learned in school soon becomes obsolete in the wider society. Even in the most developed of these countries, governments are realizing that young people are not being properly prepared to think and act independently and creatively within a perspective of learning beyond school.

The Report of the International Commission on Education for the Twenty-first Century proposes reorientation and re-organization of education systems through curricular innovations/reforms based on the guiding principle of 'learning throughout life', building on the 'four pillars of learning', (learning to know, learning to do, learning to be, learning to live together). This has strong implications for the process of curriculum reform, taking into consideration the cultural sensitivities of each country.

Curriculum reform is a complex process, and requires curriculum developers' full awareness of the intentions of and demands made by policy-makers, an understanding of the diverse needs of students and the

challenging tasks of teachers. It also requires a full appreciation of the concerns of parents, employers, other interest groups and the society at-large. Curriculum professionals need to master a number of essential competencies in order for curriculum development and reform to be carried out as effectively as possible through all stages of the process. Clarity of objectives, consistency and feasibility of plans, active participation and a sense of ownership by key stakeholders, sustainability of change, all need to be ensured.

The IBE's mission is to strengthen the capacity of UNESCO Member States as regards the content of education. It has identified the strengthening of competencies among curriculum specialists as a key area of concern. The UNESCO Principal Regional Office for Asia and the Pacific (PROAP) has long been involved in capacity-building for curriculum development in the region. Its present concern is to examine the strengths and weaknesses of the curriculum for basic education of selected countries in East and South-East Asia and to formulate a sub-regional strategy for developing a curriculum framework for the twenty-first century. Both institutions have therefore come together to organize this seminar in light of their shared aim to build national/regional capacities for curriculum reform.

### OBJECTIVES OF THE SEMINAR

- To exchange experiences about recent and ongoing initiatives in curriculum reforms in the participating countries.
- To develop a number of competencies related to a systematic process of curriculum reform, within the perspective of "learning to learn".
- To formulate a regional curriculum framework, as defined in the Delors Report. The framework will identify criteria for curriculum analysis and will be used as the basis for the conducting of national case studies in selected countries.
- To begin a dialogue on modalities for closer regional co-operation in the field of curriculum development, leading to the establishment of a "Network of Curriculum Specialists" in the South-East and East Asia sub-region.

### PARTICIPATION

Participants will be invited from the following countries: Cambodia, China, Indonesia, Japan, Lao PDR, Malaysia, Mongolia, Philippines, Republic of Korea, Thailand, Viet Nam, and SEAMEO-RECSAM. The seminar is intended for Directors or other high-ranking officers of Curriculum Development Centres or corresponding institutions.

## CONTENTS AND MODALITIES

The seminar will emphasize active participant involvement and interaction. It will be divided into country presentations, training and drafting components. Training sessions will consist of a presentation by an expert in one of the selected competencies, followed by group work and discussion. Drafting sessions will be carried out by identifying members of task groups, who will formulate the outlines of key documents.

### COUNTRY PRESENTATIONS

To allow for informed exchange within the regional context, participants will be requested to prepare written reports on their country's recent curriculum reforms, identifying the main elements and stages in the reform process. Participants will receive guidelines for the preparation of these country presentations.

### COMPETENCY PROFILE PRESENTATIONS

Principal elements of the selected competencies will be presented by experts in the field. Presentations will be interactive and supported by OHP or multi-media learning aids.

### WORKSHOPS

During the workshops, aspects of the skills to be developed will be practised through various exercises, facilitated by the invited expert. Each session will end with a discussion of the main elements of each competency and

how it may be applied actively to the curriculum development process, and in the formulation of a 'generic' regional framework.

### DRAFTING SESSION

During the second half of the seminar, discussions, followed by practical drafting sessions, will take place to formulate the curriculum framework and the guidelines for the case studies to be undertaken on curriculum reform in selected countries.

Each participant will be requested to bring to the seminar, copies of the national curriculum for the basic education level. This will be the main document used in preparing the analysis of the country's national curriculum, following the framework agreed upon. (Background Document: the Delors Report.)

### CONCLUDING SESSION

Participants will discuss plans for national follow-up action relating to the conducting of the case studies on curriculum reform. Participants will also have the opportunity to discuss the possibility of creating a regional network of curriculum specialists. This network would permit participating countries to intensify information exchange on curricular issues, and develop, under IBE and PROAP leadership, various shared activities (such as conducting studies of a common interest, organization of policy seminars for decision-makers, development of expertise in various curricular areas, etc.).



The  
international  
quarterly review of  
comparative education

# PROSPECTS

*Edited by the International Bureau of Education, P.O. Box 199, CH-1211 Geneva 20*

The most recent contents of Prospects can be consulted on the Internet: [www.ibe.unesco.org](http://www.ibe.unesco.org)

*“Open files” for PROSPECTS in 2001 — Volume XXXI*

- No. 1, March 2001: *Secondary education*
- No. 2, June 2001: *Constructivism in education*
- No. 3, September 2001: *Education for living together in the twenty-first century*
- No. 4, December 2001: *School autonomy and evaluation*

Annual subscription rates to *Prospects* are as follows :

- Annual subscription in developed countries: 180 French francs(27.44 Euros);
- Single copies in developed countries: 60 French francs (9.15 Euros);
- Annual subscription in developing countries: 100 French francs (15.24 Euros);
- Single copies in developed countries: 35 French francs (5.34 Euros);

All correspondence concerning subscriptions to the English, French and Spanish editions of Prospects should be addressed to: Jean De Lannoy, 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](mailto:jean.de.lannoy@infoboard.be)

Prospects is also published in Arabic, Chinese and Russian. Inquiries to the IBE:  
[j.fox@ibe.unesco.org](mailto:j.fox@ibe.unesco.org)



**U.S. Department of Education**  
Office of Educational Research and Improvement (OERI)  
National Library of Education (NLE)  
Educational Resources Information Center (ERIC)



## NOTICE

### Reproduction Basis



This document is covered by a signed "Reproduction Release (Blanket)" form (on file within the ERIC system), encompassing all or classes of documents from its source organization and, therefore, does not require a "Specific Document" Release form.



This document is Federally-funded, or carries its own permission to reproduce, or is otherwise in the public domain and, therefore, may be reproduced by ERIC without a signed Reproduction Release form (either "Specific Document" or "Blanket").