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## ABSTRACT

This report was presented and discussed at a seminar on "The Secondary Education Curriculum in Latin America: The View of Specialists" which took place at UNESCO's International Institute for Educational Planning. It also incorporates information and comments put forward at the seminar by participants from Argentina, Chile, Uruguay, and Brazil. Its purpose is to initiate dialog and international cooperation with respect to new global trends and secondary education curriculum changes in Latin America in the 1990s. The introduction briefly surveys the question within the context of Latin American educational reforms and the institutional characteristics of individual countries in the region. The report looks at some of the main changes occurring in the world and the new challenges these represent for the education of young people. It also puts forward some considerations regarding the shape that is being given to new curriculum material to meet these challenges in the context of Latin America. The report focuses briefly on a few key features that are giving a renewed identity to secondary education, especially competencies and the development of personalities. It offers suggestions regarding the characteristics of official curricular elements in the 1990s. An appendix lists the structure of the education system, intermediate-level requirements in selected Latin American countries, and gross attendance rates for 1985 and 1995 at the intermediate level. A list of participants is also given. (Contains 37 references.) (DFR)

# THE SECONDARY EDUCATION CURRICULUM IN LATIN AMERICA:

## NEW TENDENCIES AND CHANGES

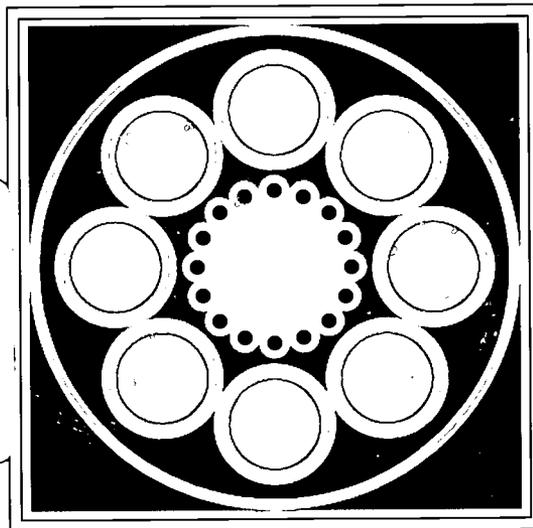
*Cecilia Braslavsky*

FINAL REPORT OF THE SEMINAR ORGANIZED BY THE  
INTERNATIONAL BUREAU OF EDUCATION  
AND HELD AT THE  
INTERNATIONAL INSTITUTE FOR EDUCATIONAL PLANNING,  
2-3 SEPTEMBER 1999, BUENOS AIRES, ARGENTINA

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# Presentation

This report was presented and discussed at a seminar on 'The secondary education curriculum in Latin America: the views of specialists', which took place at the Buenos Aires headquarters of UNESCO's International Institute for Educational Planning (IIEP) on 2 and 3 September 1999. It also incorporates information and comments put forward at the seminar by participants from Argentina, Chile, Uruguay and Brazil.

The purpose of the report is to initiate dialogue and international co-operation with respect to new global trends and secondary education curriculum changes in Latin America in the decade of the 1990s.

It is divided into seven chapters preceded by an introduction, which briefly surveys the question within the context of Latin American educational reforms and the institutional characteristics of individual countries in the region.

The first chapter looks at some of the main changes occurring in the world and the new challenges these represent for the education of young people. Chapter II puts forward some considerations regarding the shape that is being given to new curriculum material to meet these

challenges in the context of Latin America. Chapter III focuses briefly on a few key features that are giving a renewed identity to secondary education, especially competencies and the development of personalities. Chapter IV gives suggestions regarding the characteristics of official curricular elements in the 1990s. Chapter V looks at the impact of curriculum changes at present and highlights the tensions apparent in new curriculum proposals, in relation to continuity and innovation in disciplines and curriculum content, in the teaching of other languages, in the adoption of alternative forms of curriculum and in the connection with youth cultures. Chapter VI outlines some of the concerns which are emerging in countries where the process of curriculum change is already well advanced, basically those related to the institutional component of change. Lastly, Chapter VII contains clarifications and explanations arising from the dialogue among specialists, together with some suggestions for exchange and co-operation between Latin American countries and teams and institutions in other parts of the world, especially through UNESCO's International Bureau of Education.

# Introduction

The decade of the 1990s in Latin America has been particularly creative in terms of educational reforms and innovations. Little by little, new needs, expressions and practices have begun appearing at all levels, together with new arrangements of education systems, though at different rhythms and through different initiatives.

This movement is beginning to extend to secondary education, according to the stages of education systems that were devised towards the end of the nineteenth century as non-compulsory preparation for university or for entry to the labour market (Mueller, Ringer & Simon, 1992). For some decades now, these secondary education stages have followed on from a period of primary education lasting more than five years, which has itself been undergoing a process of transformation and extension (Braslavsky, 1995).

Before the 1990s, considerable importance was attached to the position of each level or cycle within the education system and to the boundary lines between them. At present, concern appears to be shifting to other issues. It is no longer a matter of trying to establish the identity of each of the old levels of the education system, including secondary education, or to decide the best point at which to divide one from the other. Instead, interest has shifted towards defining an educational package that lasts twelve years, organized so as to avoid sudden transitions between its various stages and aimed at providing the whole population of the country with basic education.

As a result, there is an increasing tendency to assume that what is important is avoiding young boys and girls having to face sudden transitions

between institutional models created for different purposes and catering for different social classes and sectors. The basic package of twelve-year general education for all may now be organized in cycles of different durations according to socio-economic conditions, traditions and even the individual preferences of educational communities.

There is also a tendency to assume that any division decided upon between stages may prove better or worse depending on the context, and cannot be applied uniformly in all countries or even throughout one country. The diversity of structures—which used to be considered a heresy opposed to equity—is now being seen as an alternative way of achieving more relevant forms of organization suited to different populations, that is, as a possible tool of positive differentiation with which to build a higher form of equity.

To achieve this, it has to be ensured that the type of education promoted through curricula does not on account of these organizational differences further reinforce existing inequalities between students due to their origins.

In a situation where structural questions are losing their relevance and in order to avoid referring to any of the levels in the old structure of the education systems, another term has to be found to discuss secondary education. The meaning adopted for the purposes of this report will be 'education for young people between the ages of 12 and 18'.

For institutional reasons related to the role played by the State in the organization and supply of secondary education, Argentina was the first country in Latin America that tried to develop a policy of improving the quality of

secondary education—as far back as the mid-1980s. The implementation of this policy was then interrupted when responsibility for secondary schools was transferred from the nation to the provinces. Nevertheless, some of the problems remained under discussion and were brought up again in the provinces towards the end of the 1980s and beginning of the 1990s, and on a national scale towards 1995.

In a second stage, other countries joined the movement in favour of the qualitative improvement of secondary education, particularly Chile and Uruguay.

At present, the majority of Latin American countries are starting to place the question of the transformation of secondary education on their agenda. Brazil, Peru and Bolivia, in particular, have begun to prepare programmes for improving and expanding secondary education and have attained different stages of development.

But beyond the stages and strategies adopted by each country in its efforts to expand and transform secondary education, they have all given prominence to the question of renewing the curriculum. This issue has attracted increasing intervention and interaction at the various institutional levels of government, i.e. national, provincial and even municipal.

In the major federated countries, curriculum development has been taking place simultaneously on different levels, that is, on a national level, at the level of individual provinces and states, and in establishments embedded in their local environments. In countries with a unified structure, on the other hand, the provincial or departmental aspect does not take on the same dynamism, so that changes tend to arise from the connection and interpenetration of national policies and institutional innovations. In this new dynamic, it is not as clear as it was a few decades ago at what level the responsibility lies for the content of education, seen as the core of the school curriculum.

Historically speaking, it was assumed that responsibility for defining the main content of education lay with the State. The curriculum, as an arrangement of educational content, was to be the heart of the national educational plan. But this assumption was questioned as a result of the powerful expansion, decentralization and reallo-

cation of budgetary responsibilities that occurred in Latin American education systems. In some countries at the present time, the main responsibility for defining the curriculum rests with the State, while in others it lies with the provinces. This difference is reflected in the legal status acquired by national curricula in each country.

Nevertheless, some common tendencies have been emerging in the production of curricula beyond the political level, which in formal terms carried the greatest responsibility.

The fact that common tendencies have appeared in the production of curricula in very different countries may, of course, be interpreted to mean that either inside or outside the region the same policies have been developed for subsequent implementation in different situations. The truth is, however, that at present the search for solutions to the problems of secondary education in Latin America is to a large extent a shared undertaking, including a search for similar references abroad, especially in European countries.

The curriculum material used in Chile, for example, was borrowed from Argentinian ideas—which then borrowed some of them back again—while in Brazil there is a tendency to select aspects from both experiences and to combine them with home-grown ideas and innovations. Bolivia cites definitions taken from Argentina, and so on. In all cases, references are made to Spanish bibliographies, and to a lesser extent the literature of North America, France and other countries outside the region.

This report is proposed as a preliminary analysis of how curricula are produced for secondary education in Latin America, based on the recognition of common tendencies in modern curriculum development affecting the whole region, and focusing primarily on national documents and highlighting the production of South American countries. The purpose of the report is to help enrich the dialogue and debate regarding the situation and curriculum changes occurring in the world, with a view to strengthening the capacity for shared learning and so as to enhance the impact of the changes that are being proposed and promoted.

## The major tendencies of contemporary development and Latin America

The most prominent analysts of the trends followed by modern societies agree that the twentieth century was short and ended in 1989 (Hobsbawm, 1996). After that date, events in different parts of the world have tended to be even more interconnected than in previous periods. The processes of internationalization and globalization, which were launched at the very beginning of the modern era in the fifteenth century, are now attaining degrees of intensity and extension which until recently were quite unthinkable. In one way or another, economic, social and cultural development trends are now permeating all continents and affecting all peoples, thereby determining the spectrum of possible responses and alternatives available to satisfy human needs and especially educational ones.

This tendency has gained so much ground that many authors are wondering if we are not already reaching the point where we need to reflect on the desirability or even the actual emergence of a kind of worldwide education system (Adick, 1995), subject to a few national variations and a greater diversity of institutional alternatives within individual countries.

A good starting point for discussing this hypothesis would be to take a closer look at what these economic, social and cultural development trends currently sweeping across the world—including Latin America—really consist of, in order to identify within that context what sort of challenges secondary education is facing and what sort of responses are being produced to meet these challenges. By comparing the responses, it would then be possible to observe collectively whether or not the idea is sustainable that—at least within the region—cer-

tain trends are emerging that could eventually produce components of a transnational education system with a regional, or at least a sub-regional, dimension, or even a regional configuration of components forming part of a worldwide education system.

### A HETEROGENEOUS, DWINDLING AND INCREASINGLY CHANGING LABOUR MARKET

There are at least five economic trends currently occurring worldwide which are also evident in Latin America. The first of these is the reduction in the employment opportunities not only available but necessary to satisfy the basic requirements of society. The significance of this is that young people nowadays emerging from the educational process may be increasingly delaying their entry into the labour market and experiencing periods of unemployment or underemployment. The second is the growth in the greater number of jobs available in the service sector compared with the agricultural and industrial sectors. The third is the growth of informal compared with formal employment. The fourth consists in the increasingly rapid changes taking place in job profiles, particularly with regard to specific skills, while the fifth is the changing scale on which the working lives of individuals are conducted in practice. One of the major factors in the latter process is the internationalization of the labour market. This means, among other aspects, that capital, companies and workers all have the possibility of migrating from one country to another in order to find a better 'fit' with the

requirements and availabilities of their interrelated capacities and opportunities.

These economic processes give rise to different challenges for secondary education. The reduced employment opportunities available raises the question of postponing entry to the labour market and extending compulsory schooling so that complete secondary education automatically forms part of it. Expressed in terms of the subject of this document, this leads us to the conclusion that the secondary education curriculum will in fact become the official curriculum for a period of compulsory schooling for young people, who will not be offered many alternatives except to remain within the education system. On the other hand, the rapid change in occupational profiles is increasingly reviving the traditional purpose of the education system—to teach people to learn—making it into a socio-economic and personal imperative, while the loss of job creation in the agricultural and industrial sectors is forcing a reconsideration of job training, which will have to be more geared to services and white-collar activities, even within agro-industrial production. The growth of the informal compared with the formal sector of the economy leads to the assumption that it is highly desirable for all young people to learn do, in addition to becoming familiar with key aspects of culture. Lastly, the globalization and internationalization of the economy raise the need for education in different countries to achieve some shared standards, in order to avoid the population in disadvantaged regions from remaining totally excluded from certain areas of production and development.

Taken together, the new economic trends raise the urgent question of the identity of secondary education. Some of its aspects are designed to train young people for some kind of job, through a system of specialized options proposed initially at the age of 12 or later at the age of 15. It would now be worth reconsidering this need for secondary education to relate to the economy. Is it possible or even desirable for secondary education to consent to train for the labour market when the latter appears to offer little room for all the young people streaming out of secondary schools? In the last decade, in-

creasing emphasis has been placed on the consideration that the real challenge for secondary education should be not so much to train for the employment market, but rather to train for employment. It will probably be necessary to be even bolder and suggest that education—taken as a whole—should train for multiple activities (Gorz, 1998), that is, for a productive occupation, for cultural creativity, for a harmonious social life, for family life, etc., and for an alternation between periods when one or another of these types of activity will predominate throughout a person's life.

## THE WORSENING OF SOCIAL INEQUALITIES

One of the most complex features arising from the new trends in economic development, the consequences of which are the most difficult to predict, is the aggravation occurring in existing social inequalities and the emergence of new types of inequality. According to a number of authors, the starting point in life should increasingly be seen in modern societies as the determining factor in an individual's subsequent career (Fitoussi & Rosanvallon, 1997; Altimir, 1997; Minujín, 1999). They suggest that social mobility is nil and that owing to the many opportunities for young people to accumulate their educational capital, the inequalities in later careers would be greater than those already there at the starting point. If so, the task of meeting the challenges of living together, of economic growth and democracy would be extremely complex. Day-to-day violence would constantly increase, turning into a kind of permanent guerrilla activity, though without any political goal in terms of reform or social revolution (Rifkin, 1996).

While it is hard to imagine that this type of situation can be countered merely through educational policies (Braslavsky, 1999), it would seem to be particularly important to deal with two questions.

The first concerns the problem of designing curricula and educational processes that at least attempt to offer equivalent educational opportunities to all young people, regardless of their

social origins, thereby constantly challenging the assumption of an irreversible structural determination of educational careers—even in the knowledge that whatever may be achieved will necessarily be limited. One way of arriving at this outcome would be to ensure that all educational paths offer a reasonable amount of general education, including basic humanistic and technological components, as well as context-related training.

The design of educational methods based on teaching experiences containing strong situational and problem-solving components, although historically rooted in the development of school disciplines, has tended to be a waning alternative. According to some authors (Goodson, 1995; Dussel & Pineau, 1995), efforts to build a more context-related secondary education did not succeed because their success would have signified relaxing the criterion of access and continuity in secondary education as a means of differentiating between élites and workers. Recent scientific and technological advances are believed to be transforming occupations little by little in such a way that manual work is tending to disappear as a career option, its place being taken by automation.

In the circumstances, the combination of a solid general education with humanistic, scientific, technological and context-related components would constitute the only possible alternative allowing all young people to have access to the types of jobs that will endure and for the performance of which they will need to know both how to think and how to do. That combination would also enable the young people to learn how to think better and do better. In fact, there would appear to be accumulating empirical evidence in the world that the combination of both types of learning improves the quality of each of them and opens the way to new solutions to problems with social, economic and political systems where these do not exist (de Moura Castro, 1984; Araujo & Oliveira, 1994).

The second question would be the need to give more time to training qualities that encourage young people to appreciate harmonious and peaceful co-existence and to reject polarized societies. Put in a different way, young people need to be encouraged to understand that the

unequal, arbitrary distribution of opportunities of access to social benefits, especially education and work, can jeopardize the survival of society as a whole.

## BETTER RECOGNIZED DIVERSITY

Historically speaking, education systems were conceived to 'transfer the culture of adult generations to younger generations', even more so in the case of secondary education than in primary education. This position was based on five assumptions that now appear open to doubt. The first is that the younger generations do not have a culture of their own and therefore offer no resistance to the learning of adult cultural contents and norms. The second is that adult culture is homogeneous. The third is that youth cultures are also homogeneous. The fourth assumption is that adult culture and, as part of that culture, the production and structure of knowledge are stable over time, while the fifth is that education systems and schools are the main depositories of expertise in terms of transmitting this information.

In recent years, however, there has been a recognition of Latin America's cultural diversity and an acceptance of historically subordinated cultures, especially indigenous ones (Calderón & Dos Santos, 1995; Martín-Barbero, 1998). In this respect demands have been voiced in many countries for this diversity to be taken into account, including in the changes being introduced in secondary education, with suggestions, for instance, that indigenous languages could be taught as part of the secondary education curriculum.

All over the world, and as part of this general movement in Latin America as well, there has been a growing tendency for youth cultures to emerge and prosper through forms of production and consumption occurring in circuits outside the schools (see, for example, Semán & Vila, 1999). According to some views and research, the failure of the secondary school model to adapt to the characteristics of the new social groups and sectors attending secondary school, added to the failure to take account of the existence of young people's own require-

ments and demands, are significant factors when it comes to understanding the reasons for dropout and low learning levels among adolescents and young people (Finkelkraut, 1987; Obiols & di Segni de Obiols, 1994).

This means that if young people are to attend, stay and learn in secondary schools, they have to find there opportunities for taking an active part in a variety of practices that allow them to make their schools into youthful living environments. Furthermore, youth is not a homogeneous conglomerate, but a collection of groups of persons with varied interests, needs and knowledge, at times converging and at times diverging with respect to adults and among themselves (Braslavsky, 1987; Touraine, 1988). But their culture is not the perfect alternative, nor can it be the only point of reference for secondary education.

Secondary education emerged at a time when knowledge was being structured into academic disciplines, which were considered to be clearly separate from each other and likely to remain significantly constant over time. With the appearance of a new scientific-technological-productive system (Lesourne, 1993), however, the divisions between academic disciplines have been constantly effaced and redrawn, while strong internal links have appeared, only to prove short-lived. Some major disciplines structured in the second half of the twentieth century have remained excluded from secondary education, while other more precarious disciplines have kept their place. It needs to be understood that, apart from concepts and data that become outdated, the curriculum must contain fertile procedures for lifelong learning, or at least a combination of both structured in accordance with an organizing principle external to both.

Lastly, the revolution in communications has opened the way to new expert systems for transmitting and accessing information, as well as to cultural values and standards that are much more effective at fulfilling those functions than education systems and secondary schools (Harasim et al., 1995; Palloff & Pratt, 1999). It is therefore essential that schools should take full account of the risks and opportunities that these new expert systems give rise to, especially

with the emergence of the concept of connected intelligence (de Kerckhove, 1997). The communications revolution could also shed useful light on the local impact of regional and worldwide tendencies.

#### ATTEMPTS AT EXTENDING DEMOCRACY: BETTER REPRESENTATION AND MORE PROTAGONISM

In Latin America, broad social sectors are seeking alternatives in order to change politics, taking this to mean all concepts and actions related to public affairs. This search is associated with the crisis occurring in the forms of representation and the legitimacy of politics in the region, with changing forms of economic integration, with growing social exclusion and with the restructuring taking place in communications. What has emerged is the model of a 'market society', where everything is negotiable and individualistic strategies opposed to collective compromises are energetically pursued (Lechner, 1999).

This emergence of a 'market society' model is related to a sense of disillusion. A few decades ago in Latin America, democracy was exclusively associated with institutional forms of democratic liberalism or with the welfare state and its paternalistic concern with redistribution. In that context, the challenges arising for the education of young people consisted of training voters and the representatives and officials of a State governed by the rule of law. The way of overcoming disillusion presently lies in extending the concept of democracy or changing it into another able to reactivate the willingness to rebuild those collective compromises on the basis of social practices. Little by little, in fact, expectations have been growing with regard to the possible contributions that secondary education could make to democracy. The very concept of democracy took as its core the defence and promotion of human rights, and hence the forms of living which entail a recognition and a learning of these new collective compromises. This changing concept of democracy is also associated with the experience of physical

violence of the 1970s and 1980s, and with the wish to avoid any recurrence of that violence, as well as with the experience of extreme social inequality and its consequences in terms of family disintegration and personal insecurity.

Based on this broader conceptual approach, which influenced many countries in the region, new issues began to loom increasingly large on the agenda and to be seen as challenges for secondary education. They include the teaching of human rights from a conceptual and existential point of view, the respect for differences and the integration of young people with special educational needs in regular schools.

Young people themselves appear to be caught up in a tension between that apparent disillusion with politics on the one hand and, on the other, social, cultural and religious associative prota-

gonism, which has been attracting an increasing number and a greater variety of institutions and individuals, and which detaches them from the accusation of apathy by adults, for whom the only legitimate forms of political participation are those that relate to the familiar context of the party system.

The likelihood that these new forms of protagonism will become institutionalized in an environment suited to the joint and shared promotion of a better quality of life also depends to a significant extent on the opportunity for young people during their education to acquire capacities and values suited to life in common. This would require more time at school than that available in the old system of primary education, as well as contents and teaching concepts different from those of the traditional secondary education system.

## The challenges of curriculum development for the education of young people in Latin America

After analysing the various aspects presented so far regarding the tendencies towards change in Latin America and the world, it may be said that secondary education curricula will also have to be reformed in response to the strong demand for enrolling more young people in education and for improving the quality as well as the efficiency of the education offered to meet the needs of young people. What is needed is a combined approach to achieve greater flexibility and structural modernization, as well as changes in the contents and methodologies of teaching and learning.

In some countries, particularly Chile and Argentina, more than 70% of young people were already attending secondary education in 1995 (UNESCO, 1998). In other countries, the percentage of young people currently admitted is growing very rapidly. In practically all countries, this level of the education system is expanding much more rapidly than primary education. Moreover, the young boys and girls now entering 'secondary education' come from broader social sectors. Many of them belong to families that have come into contact with secondary education for the very first time, possess no books or other printed material at home, or have no access to the new communication and information technologies.

In many Latin American countries, both adults and young people have the feeling—although they do not understand exactly why—that the secondary education curriculum is profoundly inadequate. The worsening of social inequalities and this feeling of the inadequacy of curricula converge in the day-to-day routine of educational establishments, giving rise to situations of violence, apathy or educational com-

plicity between pupils and teachers, who are also at a loss before the novelty and scope of challenges that they were never trained to deal with. These situations tend to take on an added twist when the age of the teachers is very close to that of the students or, on the contrary, very far removed.

Traditionally in Latin America, there was no such thing as a 'curriculum' for secondary education. What we now refer to as 'curriculum materials' in Latin American secondary education consisted typically of plans and programmes.

In the early 1990s, there was a growing awareness that it was worth producing a different kind of curriculum material, which led to the curriculum changes already mentioned. As a result of these changes, several Latin American countries, in particular Chile, Argentina, Uruguay and Brazil, have now introduced new curriculum guidelines, which take on different forms, denominations and legal status.

Chile developed a set of Basic Objectives and Minimum Contents (Chile, Ministerio de Educación, 1998*b*). These guidelines were then approved as a national law. In Chile, the education system operates on a privatized and municipal basis. Despite the fact that they are now part of national law, the Basic Objectives and Minimum Contents are not mandatory. Nevertheless, feeling the need to commit themselves to a common educational policy, 95% of all educational establishments accepted them. In the opinion of ministerial experts and many teachers, these materials do not provide sufficient guidance. As a result, study programmes were added subsequently in the form of 'worksheets', containing options, activities, bibliographies and other

types of support for teachers (Chile, Ministerio de Educación, 1998b).

In Argentina, the Federal Council for Culture and Education, consisting of the ministers of the country's twenty-four provinces and chaired by the National Minister, issued Common Basic Contents graduated by cycles (Argentina, Ministerio de Cultura y Educación, 1997). These contents have to be incorporated in the Provincial Curriculum Designs, but may be modified for easier teaching.

In Brazil, the national education council, which consists of notables and not of the ministers of education of the different states, drafted some Curriculum Parameters (Brazil, Ministério da Educação e do Desporto, 1998a; 1999) that recognize four levels of specification, but which are intended directly for voluntary use by educational establishments and teachers in the preparation of the curricular aspects of institutional plans. Uruguay, on the other hand, a small but centralized country with some 3 million inhabitants, put forward plans and programmes for gradual, mandatory implementation (Uruguay, Administración Nacional de Educación Pública, 1999a, b, c).

The methods of preparing the new curriculum materials differ from the methods formerly used to prepare traditional plans and programmes. From the origins of secondary education until the 1950s, the latter used to be prepared exclusively by a commission of expert teachers in different disciplines, in a pedagogic climate in which constant updating was not considered a normal procedure. The degree of inertia inherent in this approach to curriculum change tended to support only officially approved institutional structures and teaching fields and methodologies, while failing to attend to current needs by allowing the incorporation of contents taken from new disciplines or fields of knowledge, or even motivated by the need for improvement in the quality of education.

As a reaction to this approach to curriculum development, which emphasized the fragmentation of secondary education into a series of independent disciplines (Hargreaves, 1982), educationists, experts and officials specializing in the institutional design of establishments and the education system were called in to help in the

1950s and 1960s. The inertia inherent in this method of promoting curricular change tended to blur the requirements, possibilities and limitations of modernizing disciplines and methodology, since these types of professionals are often not in tune with the creation of new knowledge in the different academic fields or in touch with economic and cultural production.

One response to these situations in the 1990s was the recognition that there were two different types of persons who had to be involved in the process of curriculum development: on the one hand actors and protagonists, and on the other outside references.

Recent efforts to develop curricula on a national scale have aimed at involving teachers as partners, but not so much to change the curriculum as a standard but to understand the curriculum as practised. At the same time, it was assumed that teachers need to exchange views with non-teachers in order to borrow best practices from them drawn from broader horizons. It was also assumed that these non-teachers should not be restricted to educationists and experts specializing in curricula and related matters. Teams of scientists and academics were also brought in to support proposed changes on the basis of their own epistemological and scientific experience.

It is increasingly admitted that mere academic 'updating' does not provide sufficient justification for curriculum changes, because academic contents become rapidly outdated and because simply updating content is not the only valid reason for undertaking curriculum changes. The criteria need to be more closely related to the relevance of changes and their effectiveness in terms of imparting new skills. In some cases and to a partial extent, for example in the redevelopment of technical and professional education in Mexico and for general education in Rio de Janeiro, the involvement is sought of groups which earlier used to be known as interlocutors or outside references. These included businessmen, non-governmental organizations, political leaders, artists and media professionals, who were asked for their views about the requirements of secondary education.

This search for dialogue about the need for curriculum changes with contacts outside the actual

education system and the academic world have led to working methodologies that are more appropriate for the design of educational methods to replace the old technical schools, the aim being to progress towards a multiplicity of careers leading not so much to specializations related to broad professional families and offering more flexible and polyvalent working profiles, as to the design of general education for young people. No satisfactory ways have yet been found of involving parents and the youngsters themselves in the process of curriculum development.

Apart from the legal status, degree of prescription and the quantity and variety of actors and outside contacts involved in the development of new curriculum material for secondary education in Latin America, there has been gen-

eral consensus in proposing changes which facilitate the introduction of a more flexible form of education for young people. There is less structural rigidity than in the past, while learning content and teaching methods have also been brought up to date. Practically all approaches therefore start from the assumption that the aim is to impart competences to young people rather than to transmit information to them. Although quite significant progress may be said to have been made towards achieving this aim if the new curriculum designs are compared with the old-fashioned plans and programmes, it is still insufficient from the point of view of training young people who are going to be able to learn, to live together and to do in the surroundings they will encounter in the twenty-first century.

## The new direction for secondary education: developing competences and identities

The general view in Latin America is that all attempts at curriculum development have to start by accepting the challenge of competence training (Argentina, Ministerio de Cultura y Educación, 1997; Chile, Ministerio de Educación, 1998*b*; Brazil, Ministério da Educação e do Desporto, 1999).

There has not been a sufficient consensus, however, or enough experience to arrive at a definition of the concept of competence or at its implementation in practice. It would therefore be worth keeping the notion of 'competence' under constant review. The literature of many countries gives a broad definition of what a competence is, conceiving it as 'knowing how to do with knowledge and awareness regarding the impact of that doing' (Braslavsky, 1993). Another way of expressing this same notion of competence is as an internalized procedure which is being constantly revised and perfected, and which is aimed at solving a material or spiritual, practical or symbolic problem, while assuming responsibility for the consequences.

According to these definitions, a competence would always need to be assessed in two ways: to personal capacities; and to the socio-cultural background and activities of those who are being trained.

The aim should be for schools intended for adolescents and young people to train their cognitive, affective and ethical, interactive and practical capacities all at one and the same time. In simpler terms, they should be taught simultaneously to know and to learn, to be, to live together and to do.

In addition, the same schools should be able to situate these capacities within the context of areas in which—even if such aspects are interrelated—social, natural, technological and symbolic aspects predominate.

The pedagogic principle underlying the preference for competences as the starting point and object of the curriculum is that these very competences can be inculcated according to different contents, methodologies and institutional models, though within a given spectrum of characteristics.

If this pedagogic principle is adopted, this would also facilitate the simultaneous development of the different dimensions of young people's identity, although it would not guarantee it. If an equitable development of competences is desired rather than the uniform acquisition of contents, then young people should be given more opportunity in their schools to develop the aspects of their personalities that differentiate them. The introduction of competence-oriented curricula should enable them, for instance, to select contents and activities that would allow them to further develop certain aptitudes or to delve deeper into topics that attract their interest.

Generally speaking, education should continue to ensure the transmission of adult culture to the younger generations, but adopting another form of dialogue with youthful cultures and without claiming that it is still possible to teach everything to everyone or to offer so many millions of individuals four or five standard educational profiles, as used to be the case in the traditional secondary education systems.

## In search of a new type of curriculum for the coming decades

The traditional curricula of Latin American secondary education were not suited to organizing educational experience, that is, an active curriculum, or for the training of competences and the expression of the many dimensions of young peoples' identities. For many decades it was thought that this might be due purely to their content. Nowadays the view is rather that it is also due to their format. Curricula were structured in such a way that they became dull and rigid. They referred only to some of the aspects that affected the quality of learning in schools and did so in accordance with an inflexible prescriptive logic. Generally, they determined only what had to be taught and they did so in a prescriptive manner.

### THE CHALLENGE OF COMBINING RICHNESS AND FLEXIBILITY

Everything points nowadays to the need for different curriculum frameworks that are *flexible*, but at the same time *rich*.

A *rich* curriculum framework is understood as one that can guide the actors through the daily educational routine with respect to a great variety of aspects that affect the quality of learning achieved with students in different schools. It is a framework that refers not only to what has to be taught, but also what for, why, when, where and to whom.

A *flexible* curriculum framework is understood as one that can admit variations according to the characteristics of the individual establishments in which it is being implemented.

Based on the recognition of the new challenges that need to be faced by secondary educa-

tion, a certain consensus appears to have emerged in Latin America regarding the view that new curriculum materials should tend to offer guidelines rather than rigid prescriptions, explaining the criteria underlying why those particular guidelines were adopted rather than others, giving reference parameters and at the same time offering alternative ways of using those precise criteria with those precise parameters through examples. Lastly, they should explicitly recognize the right and ability of individual establishments to come up with better alternatives than those given as models in the curriculum itself.

If educational establishments can exercise this right to design, implement and evaluate their own curriculum within the terms of their contract towards society as public institutions, that is to say, within the framework of shared criteria and parameters, then this will further generate initiatives that will in turn enrich national curriculum frameworks.

In practice, the characteristics of curriculum frameworks currently produced are not uniform. They are *richer* in some cases than in others, more *flexible* in some than in others. The tendency in the large federated countries is for new curriculum frameworks to display flexibility. In the provinces and states—even in those which can be compared in size to countries—they are very diversified, while in unified countries they tend to be less flexible. Many provincial curricula for the third cycle of basic general education in Argentina, for example, decide precisely which compulsory curriculum subjects or areas will be studied by students and how the time available is to be distributed among them.

Moreover, while some curriculum materials develop detailed criteria for some aspects, in others they provide only indicators and parameters, and in yet other cases solutions or answers. For example, in some countries some curriculum documents propose basic curriculum structures—that is, ways of organizing and distributing contents over time—without explaining the criteria that underlie the choices. This makes it difficult to assess whether that particular structure is good, bad or fair. And when this happens, it is difficult to initiate any rational discussions about the proposals with anyone who did not take part in preparing the documents or to overcome the resistances inherent in any process of change.

### FROM FRAGMENTED, HOMOGENEOUS CURRICULUM STRUCTURES TO MORE UNIFIED, DIVERSIFIED STRUCTURES

The old type of study plan consisted of a homogeneous curriculum structure consisting of two components: a set of subjects and the current schedules, laid down as weekly workloads distributed identically for all the weeks in the school year.

In the search for greater flexibility, the new curricula have tended to replace the concept of subjects—for instance in the case of Argentina, documents refer to the concept of ‘curriculum space’ or area—and they include other components as part of the curriculum structure and organize the timetable in different ways.

#### *The coexistence of areas, disciplines and workshops*

The new curriculum proposals tend to coincide on the definition of two problems. The first is that it is not conceivable that students between the ages of 13 and 18 should be subjected to a fragmented, compartmentalized structure made up of twelve to fourteen weekly stimuli. The second is that the requirements in terms of learning to learn, to live together, to know and to do cannot be met if all those stimuli take the form of proposals structured around conceptual contents that can be merely repeated from teacher to

pupil without going through learning experiences involving the students in some way other than merely repeating them.

In any event, in practically all countries the intention is to generate reference frameworks, policies and strategies for improving the quality of and expanding secondary education by proposing fewer simultaneous ‘stimuli’, aiming to limit them to eight or ten, depending on different countries and provinces.

To achieve this, three types of strategy are being deployed. The first consists in organizing the stimuli into ‘areas’—which in Chile’s case are called sectors and subsectors—rather than subjects. The second consists in keeping subjects, but adding the possibility of opting between subjects within the same field of knowledge, as in the case of Argentina’s *Polimodal* scheme (tenth, eleventh and twelfth years). The third consists in making timetable prescriptions more flexible, organizing some of the stimuli over four terms (Argentina being again a case in point).

In the new plans and programmes approved for the common basic cycle in Uruguay in 1996 and in several Argentine provinces, it was decided to replace subjects by areas, especially for the stage equivalent to what is identified in many European countries as ‘lower secondary education’ (seventh, eighth and ninth grades). These areas are supposed to be ‘school disciplines’ built up from a selection of contents taken from several academic disciplines that use similar procedures to create knowledge, especially in the cases of the social and the natural sciences.

In other cases there is a sense of scepticism regarding the possibility of building ‘school disciplines’ that are not based on a solid academic tradition. It is argued that school disciplines tend to relate to academic disciplines that have a long tradition and facilitate the learning of a specific ‘lexicon, grammar and syntax’. In other words, they argue that a discipline is a way of organizing the interpretation of reality through a series of concepts and specific relations, which evolve through an internal logic. Learning a discipline well means also learning a language well—rigorously and in depth.

In view of the need, therefore, to diminish the quantity of matters every student has to deal with at the same time and the numbers of stu-

dents each teacher has to supervise simultaneously, it is preferable to introduce options between disciplines and to construct school disciplines, referred to as areas, with no traditional base. For the *Polimodal* scheme in Argentina, for instance, it was decided that either the schools or the students should opt for three out of five social science disciplines and two out of four natural science disciplines, according to the study plan that they have themselves decided to follow in the tenth, eleventh and twelfth years.

The possibility of opting between related disciplines would enable all students not only to learn the procedures pertaining to particular areas, but also to gain access to a language with which to interpret the world rigorously and in depth. Learning by areas in secondary education, on the other hand, does not make this possible. On the contrary, it would make secondary education very similar to primary.

The type and number of disciplines around which the competence training of young people should be structured should depend—in the view of those in favour of keeping them as options—on questions such as the interests of young people, the economic, political and social characteristics of the school's local environment, and on the availability of resources and knowledge among the teams of teachers making up each educational establishment.

In order to encourage students more decisively to learn how 'to do' in the new curriculum frameworks, it is proposed that part of the 'stimuli' should not be organized according to conceptual contents in the form of 'subjects', but by areas or according to end-products or targets to be achieved or the type of educational activities to be developed.

In a number of current curriculum documents, guidelines are appearing advocating the organization, for example, of projects, workshops and activities, which constitutes a great innovation with respect to the previous plans and programmes.

Summing up, it would appear that in this search for greater flexibility, there are two models of curriculum development that are tending to coexist. One of these is closer to the French model—with parallel but more flexible courses as in the case of Chile—and the other closer to the Anglo-Saxon

model, with a common core curriculum. But in both cases, the possibility of options is introduced, at least in the prescribed areas.

This has meant including criteria according to which the schools or the students can choose between the proposed subject options. In Chile and in Argentina (which has borrowed from Chile), this new component of curriculum structures has been dubbed 'rules of composition'.

In addition to the establishment of transparent and well-thought-out criteria in curriculum materials, the handling of such options by either the schools or the students also requires a strong consensus in the educational communities and a supportive professional climate in the schools to guide students and help them select options for their educational value and not for their assumed facility, their traditional nature or—on the contrary—their novelty. Thus, as a consequence of this change of curriculum structure, there has been a marked tendency to introduce the functions of guidance and tutorship, as something more complex than and different from the old type of vocational guidance departments (Krichesky, 1999).

Nevertheless, the introduction of options in the educational areas remains limited in its practical application due to the scarcity of available school time and budgetary constraints. In Argentina, for example, options are used on a national level but have been tending to disappear from provincial curricula in the schools of individual states, especially owing to a serious shortage of time available for school work.

*From limited, pre-distributed time to extended, free time*

One of the problems with many of Latin America's curriculum framework documents is that teaching contents and methodologies are prescribed in them with no consideration for how much time will be available to organize real educational experiences. The problem is further aggravated by a tendency to use the plans and programmes of European countries as references for Latin American curriculum development, without considering the different number of hours available to students. According to

Organisation for Economic Co-operation and Development data (1998), in the Netherlands, for example, by the time they have completed their first nine years of schooling (not counting the initial level), boys and girls will have spent approximately 9,700 hours in class. In France the figure is 8,400 and in Germany around 7,080. In Mexico, on the other hand, the equivalent figure is estimated at 6,600 and in Argentine public schooling 6,580.

Many countries are at present planning and even legislating an increase in the timetable available to secondary school students (for instance, in Chile and in Uruguay). On the other hand, some of the new curriculum materials innovate by proposing definitions and exercises that facilitate appropriate decisions regarding the use of school time by fixing parameters for each cycle (e.g. the last of basic general education or lower secondary on one hand and upper secondary on the other), for each year and for each curriculum area, and by establishing a number of hours left at the disposal of schools to enable them to develop plans suited to the needs and possibilities of each establishment.

Lastly, in some countries or provinces, the curriculum timetables make provision for free time allowing schools to try out new ways of organizing and using that time during the school year. Having uniform timetables pre-established each week makes it difficult to overcome the fragmentation of school activities. Instead, a number of countries and provinces are offering a total time schedule for each cycle in their new curriculum materials (for sixth, seventh and eighth grades and for ninth, tenth and eleventh grades), or a similar alternative, but allowing more flexible use of the schedule. For instance, it is possible to organize some curriculum areas on a half-yearly basis, by devoting specific amounts of time to some educational experiences such as workshops or camps, or by concentrating the time available for some disciplines into only one or two years.

#### THE CURRICULUM'S RESPONSE TO THE NEED FOR A RENOVATION OF TEACHING METHODS

In view of current challenges, there is a need for radical changes in teaching and learning

methodologies that still adhere too closely to repetitive, verbal traditions. Once the desirability of adopting *rich* and *flexible* curriculum frameworks has been recognized, then alternative ways must be found of promoting teaching and learning methodologies different from those used in the past, moving away from a standardized, prescriptive approach in classroom work.

Such standardized, prescriptive approaches assume that educational theories need to be enshrined in State policies. At present some curriculum materials and some strategies for their implementation subscribe to modern hegemonic theories, especially *constructivism*. Nevertheless, most of the curriculum materials recognize that responding to diversity also implies a degree of freedom to adopt and create methodologies that are better suited to individual situations and groups of students.

In practice, however, many of the problems encountered with teaching and learning methodologies in secondary education may be identified or overcome through arrangements which apparently are unrelated to the teaching and learning methodologies themselves. In effect, the arrangements adopted with regard to the quantity and type of curriculum areas which students will need to study each year determines, for instance, the possibility of organizing active, participative processes which will facilitate the training of enterprise and action competences. As a result, some countries are trying to ensure that their curriculum materials, instead of prescribing extensively, include components that enable students to deploy different learning strategies and teachers to adopt different teaching strategies, which include the development of research and action projects in the local community (on the basis of the social sciences, for example). In other words, these curricula try to affect educational changes by transforming the curriculum architecture and by facilitating a reengineering of educational establishments on the basis of this new curriculum architecture, and not through a change of rhetoric.

## New proposals for modern secondary education curricula in Latin America

Apart from the tendencies to introduce changes in curriculum structures for secondary education, it is also worth noting four types of innovations that tend to recur in all countries and in most of the provinces or states under consideration. The first type refers to teaching contents; the second to language teaching; the third to objectives and characteristics of curriculum 'areas' for 'learning to do'; and the fourth to the forms assumed by opening up the school to the youth culture.

### THE TENSION BETWEEN NEW AND OLD CONTENTS

Apart from the usual considerations as to whether to organize the new curricula for secondary education by areas or by disciplines, there has also been a tendency to reconsider the spectrum of reference disciplines, and even of disciplines that are directly incorporated in the curricula, as well as the selection of preferred contents and methodologies.

In a number of countries, subjects such as geology in the natural sciences, as well as sociology, political science, anthropology and economics among the social sciences have been gaining ground, at least as academic sources from which to build school disciplines. At the same time, doubts are being raised regarding traditional school disciplines such as geography or physics and chemistry.

In any event, even where no subjects have been added to or removed from curricula in order to avoid any corporate reactions by the teachers of the subjects affected, the selection of contents proposed for traditionally accepted

subjects is being revised to include perspectives related to new academic disciplines outside the school tradition and to exclude others from traditional disciplines that have become outdated.

Among the natural sciences, ecology is becoming more influential. In the social sciences, modern topics are being dealt with according to a more investigative and analytical approach, replacing the previous almost entirely descriptive methods. In both cases, thought-provoking topics are being explicitly introduced, even though still on the periphery of the curriculum.

Questions related to sexuality, poverty, social inequality, political upheavals and religious crises are being allowed curriculum status to varying degrees. Furthermore, many questions relating to the ethical and social training of young people are being given more emphasis in the new curricula compared with former programmes. The way controversial questions are incorporated tends to vary. In the cycle equivalent to lower secondary education, some curricula opt to include them as *transversal* issues that have to be dealt with in as many different areas, disciplines and workshops as possible. In other cases, they are incorporated into specific areas, disciplines and workshops.

The specialists tend to agree, however, that the right curriculum formulas have not yet been found to promote the training of aspects more closely related to identities. Some authors refer to this shortcoming as a lack of promotion of 'subjectivity' (Tedesco, 1997). The concept of *subjectivity* in this case is associated not only with the handling of information on matters affecting the private lives of individual students, but also with an effort to establish criteria—as personal values compatible with good social

cohabitation—applicable to the use of such information in private lives and in the community.

In most countries, a certain academic status is beginning to be attributed to *technology*, although approaches tend to differ. In Argentina, for example, the emphasis is placed on teaching technology in the sense of identifying requirements, analysing products and designing projects with a systemic approach in the upper grades (10, 11 and 12). Chile, on the other hand, tends to give more prominence to managerial technologies, while in other countries technology is almost indiscriminately restricted to information technology and computing.

A number of countries are also starting to reconsider the concepts of aesthetic education and physical education, trying to relate them more to the development of sensitivity and expression in young people, rather than conceiving them as forms of training for the body, the ear or the hand.

The original approach to aesthetic education, whereby all students had to learn music and the plastic arts, is tending to evolve in three ways: firstly, through the incorporation of other forms of artistic expression, such as the theatre and body language; secondly, through the search for teaching methods combining *art and other forms of expression*; and thirdly, to a lesser extent, through the acceptance once again of the possibility of opting between different forms of expression.

The concept of physical education, traditionally tied to military training (Aisenstein, 1996), is being replaced by a more comprehensive training of physical capacities in close interaction with emotional capacities and with the enjoyment of movement and open air activities.

All countries in the region have tended to move away from the more deductive, formalistic approach to mathematics, where the emphasis was placed on theorems and formulas, towards an approach oriented more to the solution of problems, placing greater emphasis on probability and statistics.

Another feature which is changing in all countries is the teaching of the national language, where the formalistic approach based on the teaching of grammar is being replaced by a greater emphasis on speech and the written

word. In most cases, the range of writings studied has been extended to include informative and other non-literary texts. Opinions differ regarding the desirability of keeping the compulsory reading of recognized literary works. In some cases the tradition has been maintained, which indicates that the reading of a selection of cultural products is still considered to be relevant for the training of certain aspects of a shared national identity—while in others it has been dropped.

This reconsideration of the way the national language is taught is part of a process of dialogue and debate regarding the broader question of language teaching in general.

## THE QUESTION OF LANGUAGES

The tradition in Latin American secondary education was to teach the national language and a few foreign languages. Almost without exception, those languages were—in order of precedence—French, Italian, English and, in a few cases, German.

The trend towards globalization and the defence of the right to identity have been affecting some countries—generally the poorest—as a double force inducing a shift towards a form of language teaching which may be called *impoverished bilingualism*. According to this model, in the teaching of a second language emphasis is placed on its instrumental value, as in the case of *English for international communication* in some countries and in others of an indigenous community language. The argument for maintaining the languages of indigenous peoples in secondary education is the importance that should be given to linguistic mastery of the code closest to the community and family identity as a means of accessing other knowledge.

In many cases English for international communication has been progressing at the expense of other languages which used to be granted space in the secondary curriculum. In at least one highly populated Argentine province, it has been decided that English would be the only foreign language taught in public schooling and that class hours and teachers' workloads previously devoted to teaching French or Italian

would be reallocated. Several countries only have English teaching in their official curricula. In those cases, alternative programmes had to be prepared for the teachers of other modern languages. In Argentina, it has been possible to achieve a higher level of abstraction in the approach to foreign-language content, more geared to the teaching of several languages.

The preservation of traditional languages and the greater emphasis on English for international communication cannot be objected to in themselves. After years of cultural expropriation, indigenous peoples have the right to have their cultures and languages recognized, reproduced and enriched. On the other hand, the need for access to advanced knowledge and the use of new technologies based on the English language mean that English has to be taught at this level of education. It would be worth reflecting, however, on the advisability of moving further along the path of *poor bilingualism* in curricula for the whole of public secondary education in Latin America.

This approach may in effect still further strengthen an existing sense of a communal ghetto (Touraine, 1997) and the partial development of the individual. There is a danger that all that can be communicated beyond the local domain will be foreign products expressed in international communication English. Communities run the risk of becoming entrenched behind languages which in some cases have little written output. The experiences undergone in a variety of existing cultures may be lost as far as shared living among different traditions is concerned. The communication of feelings and emotions enriched by the written word may run into serious difficulties.

Moreover, people's ability to communicate for the purposes of trade and the exchange of technologies and information may be limited as a result of being forced in all their contacts to resort to the intermediate use of English as a foreign language.

In order to live together in harmony and enjoy the opportunities of an international market, there is a need to maintain and extend policies that promote and support far-reaching multilingualism in curricula. It would be worth considering in particular the desirability of promoting

the study of Portuguese in Spanish-speaking countries and Spanish in Brazil, and introducing the possibility of teaching a varied range of languages facilitating greater contacts with many cultural horizons and studied precisely for the purpose of promoting such contacts.

## LEARNING TO DO: RESEARCH AND COMMUNITY ACTION PROJECTS AND PRODUCTIVE UNDERTAKINGS

Projects are included in different forms in the curriculum materials of various countries. The most frequent approaches consist of promoting research, community action or production projects.

In the case of research projects, young people systematically build up new knowledge for themselves through academic research. These methods try to familiarize young people with the methodologies and strategies of scientific research, though without expecting them to attain advanced levels. In practice, such projects could provide a way of producing contextualized knowledge that may be new for the area of influence of the school itself, for instance by studying the particularities of the local environment, such as water, air, local history, the perception of reality by local inhabitants, etc.

In the case of community action projects, young people are encouraged to undertake activities in different areas, such as health prevention campaigns, educational assistance for primary schoolchildren, presentation of projects to local authorities for approval, environmental clearance projects, etc.

In the case of productive projects, young people are taught to plan, implement and evaluate productive activities of different kinds, especially in the agricultural and service areas, such as the production of handicrafts or sweets, trout farming, mushroom growing, horticulture, flowers, car repair and maintenance, and others.

Introducing all three types of projects in curricula pursues the same objective, namely encouraging young people to learn to do, while strengthening their capacity to co-operate and live together. Moreover, these methods try to offer alternatives to the traditional school

approach to professional activities through apprenticeships in companies, since these are increasingly difficult to arrange in the modern world of production. The accelerating pace of technical advances and the sophistication of technologies in some areas of production have been making top-flight firms reluctant to take on students. In addition, the oversimplification of some working processes have been making many types of jobs unattractive as far as the training of young people is concerned.

## THE CHANGES IN SECONDARY EDUCATION AND THE CONDITION OF ADOLESCENTS AND YOUNG PEOPLE

The question of the relation between changes in secondary education and the new status of young people in Latin America is one that has attracted the least attention in the region. Nevertheless, it has recently been given more importance in debates concerning the curriculum and in the approaches adopted in different countries. Brazil, for instance, has been the slowest of the four countries leading the processes of secondary education change in the region. It is the first country, however, to assume that the transformation of secondary education must be governed by a policy of building *a school for young people*. In doing so, it has built upon previous experience gained by Chile, Uruguay and Argentina in promoting the lives of young people in State-run secondary schools. In all countries, moreover, there has been an effort to take advantage of isolated attempts to identify links between secondary schools and the lives of young people, especially in establishments run by churches and other community associations.

This policy of promoting the lives of young people in secondary schools adopted by Argentina, Chile and Uruguay has been implemented in three different ways.

In the case of Uruguay, it was left to the initiative of teams of teachers in individual schools. As part of the reorganization of the use of school time, the new curriculum in Uruguay left two hours a week free for individual schools to decide on the best way of using them, and a further two

hours known as the 'adolescent space', which were intended to meet the needs of adolescents and to conduct activities of personal interest or aimed at conflict resolution. In practice, in some of the sixty establishments where the new study plan has been introduced, the extra hours have been used for various purposes, such as supplementary academic activities, i.e. more classroom hours in languages or mathematics. No clear effort was made to use the time to improve the actual lives of young people in schools.

In the case of Chile, the strategy consisted of devoting a specific part of the curriculum, to which time was allocated, to promote the lives of young people in schools and to initiate projects backed up by the purchase of materials and equipment, such as musical instruments, camping equipment, etc. The idea underlying this decision was that young people should be able to use their free time in schools in pursuit of their own interests by organizing activities which they choose according to their value from their own point of view and for their benefit as a pastime. Participation in such activities is entirely voluntary. Their impact seems to be significant in terms of encouraging young people to stay on in secondary schools, though they have not yet been evaluated in terms of the quality of learning achieved.

In the case of Argentina, as in Uruguay, curriculum materials are arranged so that there is free time for the school to allocate as it chooses. Unlike Uruguay, however, in the case of Argentina this time has not yet been institutionalized as part of the daily routine in schools. This means that, with a few exceptions, the teachers in State schools are not allowed paid working time to run the new activities. In any event, there is plenty of experience in Argentina with organizing camping trips, choirs, bands and community service.

The promotion of community service has been particularly interesting. The method here is to channel the use young people make of their time to attend to the needs and interests of communities by undertaking pedagogic activities planned and programmed for their educational value. While youthful initiative is accepted, it is combined with the responsibility of teachers, since the content of community service activities tends to be decided by the teachers with

varying degrees of participation by the young people themselves. Their participation in activities may be compulsory. Examples include the sponsoring of schools in difficult situations (frontier schools), the organization of workshops for dealing with retirement formalities, the organization of workshops to provide extra teaching and educational assistance to children from low-income families, etc.

The variety of approaches to curriculum changes introduced in order to convert secondary schools into real youth establishments shows clearly the need for in-depth dialogue and exchange regarding the implications of these changes. Is it a matter of creating special subjects or of producing a new approach to the curriculum? If so, which and how?

Generally speaking, it may be accepted that the gradual replacement of curriculum structures based on vertical differentiation by subjects kept rigidly separate from each other by others that introduce the possibility of options at the discretion of schools and students, with the introduction of new types of curriculum 'areas' and of more topical and even controversial subjects in curricula, constitute ways of relating secondary education to the needs of young people. However, if these proposed methods are to lead to a new curriculum in practice, many complex changes will need to be introduced in the daily routine of schools, in the education and training of teachers, and in the bodies responsible for directing, evaluating and monitoring education systems.

## Some consequences of adopting a new identity for the secondary education curriculum

Adopting curriculum frameworks such as those described here entails the need to introduce a series of changes in other arrangements and practices which are related to the possibility of modifying the present curriculum in secondary schools, of creating establishments for young people which are truly geared to developing their capacities and identities, and of evaluating whether the curriculum agreed upon really translates into bigger and better forms of learning.

These other arrangements and practices raise at least four issues. The first is the profile of teachers; the second is the need to reorganize individual educational establishments; the third is the governance of education; and the fourth is the set of procedures used for monitoring and evaluating the impact of curriculum decisions on the learning of young people.

### THE CHALLENGES OF CHANGING TEACHERS' PROFILES

The tendency in Latin America has been for the training of secondary education teachers to follow the principle of *isomorphism*. According to this principle, teachers have to be trained with a specialization and a title related to the subject that it is assumed they will be teaching. Thus, each time a new disciplinary body is created in the academic sphere, it is reflected in a simplified form in secondary education through the introduction of a new subject of study.

Applying the principle of *isomorphism* to the training of secondary education teachers had three negative consequences. Firstly, it introduced rigidity into the teachers' work and per-

formance. In effect, according to that concept, a geography teacher only understands geography and could only teach that subject. Secondly, it tended to consolidate the model of fragmented secondary education, since if the teachers could only teach the content of one discipline and it was assumed that all disciplines would be taught simultaneously for as many years as possible of secondary education, it becomes extremely difficult to establish a different model. Thirdly, it considerably impoverished the actual training of the teachers, since in order to teach a particular subject it was only necessary to know about that subject, so the training and preparation of teachers only took into consideration aspects related to one discipline.

As a principle of secondary education teacher training, *isomorphism* ignores three key considerations. The first is that any teacher must be first and foremost a 'teacher', and only secondarily 'of something'. This means that the teacher's capacities have to be clearly geared to educating young people rather than transmitting information 'about' something. At the same time, there is no doubt that a sound knowledge of disciplines is necessary for any teacher training. But the second matter ignored by *isomorphism* is the difference between 'academic discipline' and 'school discipline'. In the general education of pupils, the main function of knowledge about a discipline is for it to be put to use; this is one of the sources of educating young people through experience with building knowledge which can be organized in different ways. This disciplinary knowledge does not in itself have the same value as it does in the creation of new knowledge and the constant reorganization of the existing store of knowledge.

'School disciplines' must give priority to the educational value of the knowledge contained in 'academic disciplines' and make use of the latter's procedures and knowledge. With *isomorphism*, the former merely become copies of the latter or the latter copies of the former, although in fact each has its own purpose. The result is that both are impoverished.

The third consideration ignored by *isomorphism* is that, in order to use the knowledge of an 'academic discipline' for the purposes of teaching a 'school discipline' intended to impart basic competences to students, teachers need to possess a broader base than that pertaining to the single academic discipline assumed to be the 'parent' of the school discipline. For instance, in order to use history to train social competences, teachers have to have a knowledge of other social sciences and a very good mastery of oral language, as well as a fair knowledge of statistics.

In order to adopt *rich, flexible and heterogeneous* curricula, containing a variety of different curriculum areas, it will be necessary to *overcome isomorphism* as the principle linking teacher training to secondary education, and to offset the effects of its longstanding acceptance by means of strategies introduced in the training of practising teachers.

In fact, in Latin American countries there are discrepancies between the supply and demand for qualified teachers working in secondary schools, in addition to years of accumulated backlog in the training of practising teachers. In Uruguay, for example, a high percentage of teachers working in secondary education do not possess the proper qualifications. Moreover, 22% of them have discipline-related qualifications, but if—according to the Plan '96 currently in effect—they work in the seventh, eighth and ninth grades, they should be teaching by curriculum areas. The same is true in Argentina in the Province of Buenos Aires, with a population of over 8 million inhabitants, and in some of the major Brazilian states, which also opted for an area-based curriculum for the stage equivalent to lower secondary education.

In these circumstances there tends to be strong resistance on the part of the teaching profession to the introduction of curricula orga-

nized by areas. This resistance takes two forms. The first is political. The teachers go in for declarations and demonstrations, while their unions oppose curriculum changes. In Uruguay, strikes were held and the teachers occupied school buildings alongside the students. This type of resistance was attenuated as more of the *liceos* joined the curriculum reform and also due to a determined policy of institutional support for schools that accepted to adopt the new curriculum, so that the tendency has been for more and more of the *liceos* to implement the new curriculum.

The second type of resistance to area-based curricula manifests itself in the daily school routine. In formal terms, reforms are accepted, but in practice the teachers, instead of teaching a school discipline called 'social sciences' or 'natural sciences', continued teaching the former school discipline called 'geography' or 'history', depending on their initial training.

In view of this situation, the authorities are left with two alternatives. The first would be to give up the policy of change because it is not accepted by the teachers. This has not been the policy followed so far. The second alternative would be to consider training teachers by trying to extend their educational horizons instead of relying on their existing disciplinary profile. So far little headway has been made along this path either.

It would appear in principle that the issue of the training needed by teachers to give effect to the new curriculum policies is one of the most serious bottlenecks. This is true from the point of view not only of its conception and contents, but also of the institutional arrangements that would need to be made to produce the range of professional profiles which the scope of the expansion of secondary education enrolment and the proposed changes appear to require.

Another problem is the challenge of designing a new type of initial training for teachers. In this respect, various alternatives are being put forward in Latin America. The first alternative, followed for instance by Bolivia, consists in transferring responsibility for all teacher training, including that for secondary education teachers, to the universities. In the context of the curriculum changes that are being tried out, it

would be worth analysing whether this strategy will or will not facilitate efforts to incorporate non-academic areas or to progress with the diversification of the type of curriculum areas that are being introduced in educational establishments. The second alternative, followed by Uruguay, consists in setting up regional teacher-training centres (known locally as CERPs), with a new educational approach including stronger links with the local community, the contracting of teachers on a full-time basis and the addition of a research function and other activities considered unusual in the traditional training of secondary schoolteachers (Mancebo, 1999). The third alternative, considered by Argentina, consists in establishing a Federal Network for Continuing Teacher Training and Retraining, comprising a number of different schemes run by higher (non-university) teacher-training colleges, as well as by universities and other training institutions. In this case, the establishment of the network is supplemented with a series of provisions introducing changes in every teacher-training college along similar lines to those adopted for the CERPs in Uruguay, with mutual recognition between training colleges and universities. In Argentina, a set of Common Basic Contents has been introduced for teacher training (Argentina, Ministerio de Cultura y Educación, 1996), which will tend to break down the policy of isomorphism in teacher-training curricula, while maintaining qualifications by disciplines. These new provisions also open the way to intensive co-operation between two previously separate circuits, namely higher teacher training and university, though perhaps not yet for the establishment of links between educational and academic institutions with others that are non-academic (Braslavsky, 1999).

In any event, it would appear that the changes made in the initial training of teachers may yet prove insufficient, both quantitatively and from the point of view of the methodological innovations they introduce. The use of new technologies and training methods is only just beginning.

There is little experience in terms of strategies for horizontal learning among teachers, and even less for a broadening of the training profiles of teachers already trained in disciplines to help them assume greater teaching responsibilities

in some schools, especially in the case of small schools. In Argentina, for example, some data indicate that a considerable percentage of secondary schoolteachers work less than eight hours a week in secondary education, which is a direct result of the prevalence of the principle of isomorphism and the resulting contracting of teachers on the basis of teaching hours rather than assuming more concentrated workloads. This situation works against any likelihood of achieving a rich, flexible and heterogeneous curriculum, offering a variety of options and types of activities, by institutional means.

## THE INSTITUTIONAL DESIGN OF SECONDARY SCHOOLS AND NEW CURRICULUM MATERIALS

There is another problem which arises from maintaining a poor, rigid curriculum and providing teacher training in accordance with the principle of isomorphism. This is the equally rigid, impoverished institutional organization, combined with rules allowing little independence for existing schools to reorganize themselves and few possibilities for new schools to be created along different lines.

In effect, since in primary schools throughout Latin America the work of most teachers is generally treated as a half-time occupation (twenty to twenty-five hours a week), it has already been established that teachers' duties would be expressed in terms of teaching hours. In most cases, the prevailing rules do not even allow public establishments to reach internal agreements for reorganizing their activities according to decisions taken by their teams of teachers.

In these conditions, it is very difficult to adopt the new curriculum standards. A flexible curriculum presumes that the teacher can take on different subjects and different functions related to the general 'teaching task' and not merely teach a single discipline. It assumes curriculum flexibility as an indispensable corollary; for example, the function of guidance and tutoring would be a task inherent in any institutional practice.

Some working documents aimed at the preparation of new curriculum materials, in Bolivia

for example, suggest setting up guidance departments as a way of helping to set up and introduce a curriculum with options.

In Latin America, the history of such departments is associated with a study structure that promotes relatively early specialization and with the need to help students with their decisions prior to specialization. While there is very little empirical research on how the departments operate, there are some indications that they do not always facilitate the guidance of students. On the other hand, there are schools which have found ways of guiding students without the need to set up such departments. In the light of these considerations, some of the new curriculum materials are tending to explore ways of drawing attention to the need for institutional arrangements that perform a guidance function without the need for guidance departments as such.

The lack of any real teaching career, which would allow more experienced and better qualified teachers to take on institutional roles and functions without giving up their classroom tasks, such as leading teams of teachers within schools or in networks of several schools, goes against the chances of improving the quality of collective work by implementing some of the new curriculum policies. Some countries in the region have tried to put forward new schemes providing for different types of teachers. So far, however, these new schemes have not acquired legal force.

One last negative factor has been the maintenance of a hierarchical, pyramid-shaped operating culture, which has tended to aggravate the isolation of many establishments. In some cases, their isolation is due to the demographic structure of some regions. But in others, it is due more to the lack of any tradition linking schools with each other. In both types of situation, it is possible to design strategies for overcoming isolation by generating new forms of training and exchange between teachers, and between teams of professionals in different establishments and by promoting linkages, taking advantage of the much greater technological resources now available in educational establishments and in the community in general.

The views held in earlier periods of modern history regarding the continuity of knowledge over time, combined with the deterioration of the State system experienced in Latin America, hampered attempts to preserve and modernize the curriculum and programming and planning units, which used to exist prior to 1970 in the Ministries of Education of a number of Latin American countries. As a result, an awareness grew regarding the need to take up again the challenge of curriculum change. New curriculum development strategies were devised to tackle change on a here-and-now basis. In most cases, these strategies consisted in acquiring equipment by using resources that were available at that time, often derived from international loans, and de-bureaucratized, that is, kept outside the Ministries of Education.

There is the impression that the measures taken were somehow responding to a 'curriculum emergency', which also required emergency policies. Once the new curriculum documents had been produced, however, the countries where the curriculum changes were most advanced began to perceive two new problems.

The first is that if curriculum products are to have a real impact in schools and become a compass for the development of secondary education, then programming and planning strategies will also need to be updated. Reducing the number of subjects or curriculum areas, for instance, implies changing the functional layout of educational establishments. This, in turn, may involve teachers working in more than one establishment, which have to be interlinked. Moreover, such changes are occurring against a background of a very strong expansion of enrolment in secondary education. One example worth mentioning is the case of the Province of Mendoza, in Argentina, where in the last fifteen years educational enrolment grew by 170,000 students to a little over 450,000, mainly due to the greater availability of secondary education. Aspects such as the creation of infrastructure and its maintenance in these circumstances tend to be dealt with increasingly by new institutional actors, such as city councils.

As a result, there is no possibility of really producing the type of teaching needed for the new curricula if the necessary changes are not strategically planned with the participation of all those involved, who are increasingly more numerous and more diverse. Several provinces and countries have started experiments in this sense, but the discussions and methodologies have still been far from sufficient to promote any real improvement in the quality of secondary education on a par with its expansion in a greater number and a greater variety of situations.

The second problem is the institutionalization of the function of curriculum innovation. There is a fear in several countries that once the new curriculum materials have been produced, the temporary teams in charge will be disbanded, the products will freeze and within ten years they will be back to a situation of lagging behind the need for innovation. There is also the fear that the rights and wrongs will not have been properly identified by processes of evaluation, research and continuous monitoring. Many professionals involved in the changes recognize, moreover, that in the decade of the 1990s action was taken on the basis of little systematic research and that the effort to access national, regional and international information has been colossal to achieve in the end only modest results.

This second group of problems is being met with a recognition of the need to institutionalize research and curriculum innovation mechanisms on a permanent footing. Latin American experience in this respect is extremely poor and out of date. Priority must be given in the circumstances to learning from other countries in other regions of the world.

## CURRICULUM CHANGE AND EVALUATION

Even before the process of change began in the curricula of secondary education in Latin

America, many countries in the region set up national systems for the evaluation of education, in most cases centred on the evaluation of students' learning performance in certain key disciplines, including languages, mathematics and—to a lesser extent—the social and natural sciences. In some countries, such as Chile and the Dominican Republic, all secondary school students had to sit terminal examinations as far back as the early 1990s.

The effect of these mechanisms and the introduction of regular examinations for students were to awaken a growing concern for the outcomes of learning and to highlight the problems of the quality of secondary education in the region (Carnoy & de Moura Castro, 1997). However, little by little the recognition grew that the type of tests that were being given to students were not in tune with the new curriculum guidelines.

Despite the fact that a great effort is being made in many countries to change the criteria on which examinations are based with a view to bringing them closer to competence evaluations, rather than tests of the mastery of information, some doubts have remained regarding the amount that has been achieved in this direction. In any case, the actual topics selected for examinations tend to limit any efforts to evaluate aspects such as whether students in the course of secondary education have learned to learn, to do and to live together. Tests are almost invariably written, individual and restricted to the fields of knowledge referred to earlier.

Within this general context, there are some different experiments which are being conducted, for instance in Brazil, where evaluation strategies and procedures are being developed to assess the acquisition of competences of a higher degree of complexity than those evaluated so far.

## International co-operation for curriculum promotion in Latin America and the role of the IBE

As things stand at present, there is no doubt that more international co-operation should be encouraged. However, while doing so, it is worth bearing in mind at least the following two considerations.

In the first place, past experience would appear to indicate that international co-operation is more productive if it offers broader horizons than those of a single region. However, as has already been pointed out, in their efforts to promote curriculum changes the countries of Latin America have not only co-operated among themselves, but they have also consulted the models, situations and procedures of countries outside Latin America.

Secondly, an analysis of the processes and outcomes concerning the promotion of curriculum change shows that the main problems arise from a lack of connection between matters specifically concerning curricula and other aspects of educational change. It therefore seems that any co-operation programme must pay particular attention to the range of complexity involved, that is to the design and implementation of co-operation strategies and activities which, while they may not avoid some overlap between co-operation scenarios and strategies, will take into account the fact that unidimensional approaches are not adequate for promoting change in such a multidimensional area as education.

In the light of these criteria, we outline below some suggestions of lines of action for co-operation by UNESCO's Geneva-based International Bureau of Education, while putting forward suggestions on how in practice to apply principles in each case, such as broadening horizons and tackling complexity.

The first line of action refers to research into and monitoring of the processes and products of reforms and the processes of curriculum innovation. The second deals with the exchange and promotion of horizontal technical counselling, while the third considers a few aspects related to the training and preparation of the different players involved with secondary education curricula. For each of these lines of action, it is not only possible but also desirable to look into different alternatives, which themselves may also be interconnected.

### PROMOTING RESEARCH INTO AND MONITORING OF PROCESSES AND PRODUCTS FOR CURRICULUM INNOVATION

As mentioned earlier, one of the major difficulties encountered by professional teams responsible for promoting curriculum change in secondary education in Latin America is the lack of data concerning the processes, products and outcomes related to curriculum changes in different countries of the world. In this sense it is worth examining the initiation of the following activities.

#### *Organizing and supporting a curriculum monitoring observatory*

Priority should be given to studying the possibility of initiating and supporting a systematic, analytical overview of curriculum processes and materials from different countries, and also from a selected group of provinces and/or local

governments in the world. In order to remedy this lack of data, it would be advisable in the short term to set up a modern, efficient mechanism that would provide rapid access to a large quantity and variety of curriculum materials. In principle, it would not appear either possible or necessary to accumulate the whole physical collection of available material in one place; it would be preferable to find ways of standardizing presentations, selecting materials and providing access to them wherever they happen to be stored; for instance, in large national libraries and in educational research institutes.

The mechanism in question could take the form of a curriculum monitoring observatory designed to perform these tasks, which would maintain an updated Internet site and would promote exchange activities between the different players involved in the process of curriculum change. For this purpose a number of criteria could be applied, such as disciplinary fields, political system (including centralized or federal countries, or countries with greater experience, for example, in terms of multiculturalism and multilingualism), particular situations or stages of development in secondary education (e.g. countries and provinces at an advanced stage of expanding their intermediate education or those which are just starting out), etc.

The type of materials to include in the site would be the curricula actually in use in different countries and provinces classified according to various criteria and organized in such a way that they may be consulted according to the specific interests of users, but there should also be available a selection of textbooks, student tests, modules for training teachers in methodologies or information on how to contact selected curriculum organizations, as well as reports on curriculum exchange experiences on various scales, such as at the level of countries, provinces, municipalities, networks of schools and the individual schools themselves.

The observatory should be set up in accordance with common standards and comparable initiatives worldwide, in order to make it easy to circulate and use its data beyond the home region and to have speedy access to the output of other regions. If the scheme became opera-

tional, then it might be possible to promote south-south exchanges, for instance between Latin America and Africa, regarding matters such as the contribution of curricula to meeting the challenges of multiculturalism in multilingual societies with low levels of economic and social development. Exchanges could also be promoted between groups of countries with similar historical traditions, such as those related to the Franco-Prussian curriculum root (which is very different from the Anglo-Saxon one) in order to be able to analyse approaches in depth and the ways in which they are managed.

#### *Undertaking comparative research concerning innovative concepts for curriculum change*

As mentioned earlier, the evaluation of learning results in Latin America is centred on measuring the acquisition of a set of instrumental contents related to a limited set of student competences. In this respect, both in the region and at the international level progress has been made in standardizing criteria and procedures for evaluating both students and teachers.

It is still not clear, however, whether from a very ambitious standpoint curriculum changes are having any sort of impact in terms of meeting the major educational challenges facing young people in the twenty-first century. In other words, we know whether young people have acquired a good understanding of mathematics or languages, but nothing about whether they are learning to learn, to be, to do and to live together. Also very little is known about the sort of strategies which might successfully achieve these objectives, either in the framework of traditional curriculum materials, by disciplines, or in the context of initiating new curriculum guidelines that include new projects and other more dynamic ways of organizing the daily routine of educational establishments.

It would be very useful to undertake comparative studies that would identify curriculum methods that have been successful from the point of view of training young people to learn to learn, to learn to be, to learn to live together

and to learn to do. This would also mean undertaking specific studies aimed at the gradual introduction of the evaluation of the success achieved by students in the pursuit of these objectives.

*Implementing and promoting original, pioneering research following alternative approaches*

It has been pointed out that there has been a tendency to launch curriculum change in secondary education in Latin America based on very little research. Whatever research is available, moreover, tends to concern the teaching side. Very rarely is any effort made to conduct research in Latin America which might shed light on the effects different curricula have on students in the short, medium and long term. It would be very useful to have original, pioneering research results that could evaluate supply from the point of view of its meaning for young people and for teachers, or from the point of view of the medium- and long-term impact it has on young people's plans for the future and on their entry into and performance in the labour market and society.

This type of research might also look into aspects of the relationship between cultural questions and educational processes.

It would be useful, for instance, to undertake comparative studies of the learning careers (not just schooling) of adults who are considered 'successful' from various points of view. For instance, this could cover: their entry into the labour market; their contributions to social solidarity; their personal well-being; their health; or their family well-being. The studies could look into the real curricula (including textbooks, teaching models, etc.) with which those adults came into contact, with a view to arriving at better working theories regarding curriculum change in secondary education.

In Europe, Canada and Australia, for instance, there are better traditions regarding this type of research. It would be useful to promote comparative studies that allow young Latin American research teams to become familiar with these approaches.

## FACILITATING HORIZONTAL CO-OPERATION

As mentioned earlier, when undertaking curriculum changes in the 1990s most of the countries of Latin America, especially those in South America, have sought inspiration from the experience of European countries. This is due to the traditions of secondary education in these countries, which, as also mentioned earlier, are more rooted in continental European models than in Anglo-Saxon models or those from other regions of the world. In response to this desire to learn from the experience of European countries, several Latin American countries made plans to convene seminars and meetings that benefited from the experience of specialists from other countries, especially from other Latin American and also European countries.

*Constructing and keeping up to date a database on specialists and institutions involved in promoting curriculum innovation*

Convening specialists has always been carried out on the basis of random working networks and at the expense of great personal effort. There is not at this time in the world any register of specialists in various disciplines and aspects concerning the modernization of contents and methodologies which would facilitate the selection of persons and institutions in a position to help find suitable solutions to problems of curriculum development in specific contexts. Horizontal co-operation would be greatly facilitated and would become more comprehensive and more productive if it were possible to construct a database of specialists in curriculum and related subjects that could be consulted in Latin America, but which would also include specialists from other countries, especially countries with shared traditions and challenges.

## PROMOTING EXCHANGE ON ALTERNATIVE RESPONSES TO SHARED CHALLENGES

It is both necessary and possible to activate processes of exchange and dialogue regarding how

to respond to common challenges. This can help generate better scenarios for each country to take the right decisions and can also save a considerable amount of time and material resources. In this respect, it would be desirable to initiate exchanges on two key subjects: firstly on contents and methodological strategies that promote coexistence beyond national borders; and secondly on alternative ways of institutionalizing the promotion of evaluation and permanent curriculum innovation in every country.

*Organizing forums, debates and seminars on globalization processes and the contents of secondary education and the training of teachers for young people*

At the beginning of this paper, we referred to a series of processes that come under the umbrella of the term *globalization*. We also mentioned the existence of a series of challenges shared by different countries, and of the local impacts of different global processes. Lastly, we raised the question as to whether or not there were any common tendencies in the processes of reform and transformation of education systems, which might eventually lead to suggestions of a move towards the configuration of a global education system. In the course of this report, we have presented some evidence regarding the existence of certain tendencies, debates and processes shared by very different countries within Latin America, which would seem to give an affirmative answer to the latter question from a structural point of view.

Nevertheless, until now there has never been any systematic dialogue in Latin America which might indicate at all reliably whether or not there are any core contents which should be learned in secondary education in all countries of the region. These contents should be a means of promoting better coexistence between the populations of different countries, preventing inequalities from growing between them, while respecting the diversity of cultures and facilitating a better distribution of scarce employment.

The same themes should be raised for debate with regard to possible contents for the initial training and subsequent retraining of secondary schoolteachers.

While the prerogative of determining curriculum contents rests and must rest with each individual country, it would seem desirable to promote an open dialogue regarding the contents of education, and its universal, national and local components. The development of information and communication technologies has now invalidated any educational approach which suggests isolating cultures and countries from each other. The question is therefore raised as to whether the acquisition of shared cultural elements should be left to the dynamic of the media market or whether there might be some intentional promotion of certain values and certain core information by those responsible for education, in consultation with political, communication, intellectual and scientific leaders.

It would be useful to conduct this dialogue on a freely interactive basis with countries in other regions of the world which share cultural horizons with Latin America, especially Europe and Africa, considering that Latin American culture has been shaped from a meeting of three different and internally heterogeneous cultural horizons: that of the indigenous peoples, that of the European countries from which strong immigration originated and that of the African peoples. Major regions with a strong Asiatic cultural presence that has recently come to the fore would also need to be taken into account.

Ideally, these exchanges should not be restricted to officials of the education sector but should systematically bring in other players whose presence is desirable or should be strengthened in the processes of curriculum change, such as artists, businessmen, representatives of workers' associations, members of non-governmental and academic organizations, etc.

*Organizing exchanges about new ways of institutionalizing innovation, curriculum evaluation and teacher training*

The precarious institutional background against which curriculum changes have been taking place in countries in the forefront of secondary education reform in the region is reaching its limits. Nevertheless, the way is being indicated

to the sort of mechanisms needed to promote processes of curriculum change in other countries of the region, which will at the same time usher in a new institutionalization of permanent innovation, more closely associated with evaluation processes.

In effect, in most of the leading countries the introduction of curriculum changes has not benefited from information obtained from student evaluation schemes, nor have these schemes been updated at the same time as curriculum methods. Furthermore, both of these mechanisms have remained only marginally concerned with the reconsideration of the possibilities and planning strategies needed to progress with more foresight in the process of secondary education change.

The way to change this situation would be to initiate a process of dialogue and exchange regarding alternative ways of institutionalizing curriculum innovation and evaluation. This should also involve the latter's relation with more comprehensive educational planning, within the framework of reconsidering the actual concept of planning, the search for a broader and more varied set of players in education and the existence of very different national, provincial and local situations.

Similarly, more thought must be given to institutional ways of organizing initial training and in-service preparation for those currently working in secondary education, as well as for those who will be attending to the needs of the young people who will be educated in the future. A serious review of the situation is called for with a view to ending isomorphism, overcoming the undoubted lack of training of those currently working with young people to meet the challenges of the twenty-first century and taking advantage of the opportunities offered by the new communication and information technologies.

In these cases, too, it would be advantageous to initiate discussions with contacts in different regions, countries, provinces and localities who have actually implemented alternative arrangements and who have arrived at some assessment of the results. In Europe, North America and Australia, for instance, there are very different institutional ways of promoting innovation and evaluation: either external to the Ministries of

Education, internal or mixed; either combining innovation and evaluation or keeping them apart; with full State funding or with mixed funding; etc. It would be very useful in Latin America to be acquainted with these alternatives in order to develop suitable mechanisms for each country, province or municipality.

In Latin America, alternative ways of organizing initial and in-service training of teachers are less well known. Some very restricted circles have a limited knowledge of training strategies applied in a main or a complementary discipline in Germany or in other European countries, or new methods of allowing non-teaching professionals to acquire teacher training in the United Kingdom and France. It would be worth gaining more knowledge of these and other training methods in addition to teacher preparation and the impact on curricula, both in Latin America and in other parts of the world.

Since this exchange would concern *institutional* alternatives, it would be worth considering the possibility of introducing new forms of exchange, consisting of more than just the organization of seminars and fora. For instance, organizing study travel for officials responsible for developing these alternatives, including visits and internships, would be very useful. At the same time, it would be worth involving legislators in the exchanges, since in most cases any creation of new institutions sooner or later has to be approved by law.

Owing to the fact that *institutionalization* alternatives involve non-curricular aspects, some thought should be given to organizing these exchanges in co-operation with other UNESCO bodies, such as the International Institute for Educational Planning.

#### INCORPORATING COMPLEXITY IN THE TRAINING OF THOSE INVOLVED WITH SECONDARY EDUCATION CURRICULA

In all the efforts undertaken to promote curriculum change in Latin America, extreme discrepancies have appeared between the different players involved with curriculum issues with regard to their knowledge and their capacities.

While the expert knowledge of teachers has been concentrated in the contents of their initial training disciplines and in methodologies for teaching those disciplines, the expert knowledge of curriculum, planning and cost specialists has not been sufficient to give them an understanding of the changes and trends occurring in the economic, political, social and cultural development of mankind and of individual countries.

The process of curriculum change, however, will only be successful if it achieves a systemic impact, that is, if it also involves an updating of contents and methodologies, changes in the organization and administration of individual establishments, changes in the profiles and working conditions of teachers, a reconsideration of the links between educational establishments and their connections with other community and social institutions. But in order to achieve such systemic changes, there is a definite need to improve the training of all those concerned with the process of curriculum change, not only to give them a better grasp of their specialization, but to complement it so that each professional group may incorporate other aspects in their training which will enable them to enter into a more productive dialogue with other professional groups and to achieve greater productivity by incorporating cross-disciplinary and multi-disciplinary teams.

*Promoting training in elements of strategic and situational planning for specialists in specific disciplines and for teachers*

One of the greatest difficulties with any attempt to expand and change the curricula of secondary education, whether sequentially or in a related manner, is that the teachers and experts involved in the development and initiation of curriculum changes do not have an overall vision of those processes.

This lack of overall vision is one of the reasons why, when it comes to putting forward proposals for curriculum changes, these actors tend to resort to some of the following strategies.

- They will suggest adding subjects or disciplines which are considered innovative, but

without removing any of those that are considered outdated, which imposes a heavy additional burden without any guarantee of keeping more students at school, or of improving efficiency or the quality of learning.

- They give up the attempt to produce changes because they cannot manage the complexity of the aspects supposedly involved in the process of introducing changes, or else they make a few efforts at re-engineering in an amateurish way, without sufficient methodological tools to guarantee greater effectiveness and efficiency for such re-engineering nor the reasonable handling of conflicts between the different groups affected.

The actual curriculum specialists and the teachers who take up positions of responsibility or assume duties that involve them in the design and implementation of curriculum changes are fully aware of these difficulties. This is why they are always looking for conceptual and methodological tools that will allow them to complement their disciplinary and pedagogical knowledge with other knowledge needed to deal with curriculum changes.

It is therefore worth giving some thought to the specific professional contributions coming from teaching, from the academic world and from educational research, so that they can intervene in the processes of curriculum change with a greater understanding and a better ability to act in light of the complexity of this process. Ideally, such training would be both flexible and intensive and would be conducted according to alternative methodologies, including the use of virtual classes, visits, internships and an improved capacity for introducing research components into activities.

It would be worth developing modules and experiments to offer this type of training in cooperation with other UNESCO bodies and organizations concerned chiefly with the training of educational planners and managers, especially, for instance, with the International Institute of Educational Planning. These modules should be administered through specific mechanisms and in agreement with establishments responsible for providing teacher training.

*Helping specialists in planning, curriculum and general education to update their understanding of the structure of current and future practical and theoretical knowledge*

Just as teachers and educationists are unaware of the basic elements of strategic, situational planning required to play an effective and relevant part in the processes of curriculum change, to avoid or manage conflicts and to achieve more efficient use of the resources invested, the specialists in planning, curriculum and general education very often ignore the changes which are occurring in the structure of present-day practical and theoretical knowledge and in the educational alternatives available, given the advances in research and in educational innovation all over the world. This lack of awareness also makes it difficult for them to anticipate future situations. In these circumstances, they may well propose plans for locating educational establishments, or building schools or other projects on the basis of references to past institutions rather than to future requirements.

To mention an example: the specialists responsible for planning the infrastructure available to receive the expanding enrolment at intermediate level are not always aware what it means to teach technology at present in a secondary school or what sort of new requirements and opportunities are being opened up by information and communication technologies.

With regard to what it means nowadays to teach technology in a secondary school, it would surely be useful for them to know about the differences between hard managerial and soft technologies, the discussions taking place about those differences, the implications this has with

regard to establishing possible working relations with the communities, the use of shared spaces outside the schools, and relations with businesses, amongst others.

It would also be very useful for them to be aware that the new information and communication technologies make it possible to organize educational establishments according to a variety of models, requiring classrooms of very different sizes and, in any case, spaces very different from the classrooms of traditional schools. One particular school project might need very small classrooms and another very large ones. Or, for instance, in a dispersed rural area with fifty children, there may be a need for just one very large classroom, one lecture room and four cubicles each equipped with four computers.

Some thought should therefore be given to the type of specific training which should be offered to professional profiles that do not originate in teaching or education, so that they too can intervene in the process of curriculum change with greater understanding and an improved capacity to act in relation to the new structures of knowledge, their changes and connections and the new teaching methodologies. Such training should also be flexible and intensive in practice, in accordance with alternative methodologies, including the use of virtual classrooms, visits, internships and an improved ability to introduce research components into activities.

In this case, the testing of the modules and experiments should be developed for this type of training in agreement with other UNESCO bodies and organizations chiefly concerned with the training of educational planners and managers, and in particular with UNESCO's International Institute of Educational Planning.

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TABLE 1. Structure of the education system and position of the intermediate level in selected Latin American countries

Country	Structure of the education system
Argentina	Compulsory initial level (1 year) Compulsory basic general education (BGE) over three cycles (9 years): <ul style="list-style-type: none"> <li>• BGE 1 (3 years)</li> <li>• BGE 2 (3 years)</li> <li>• BGE or third cycle (3 years)</li> </ul> Polimodal level Higher education
Bolivia	Compulsory primary education (8 years) Secondary education in two cycles (4 years)
Brazil	Basic education: <ul style="list-style-type: none"> <li>• Nursery education</li> <li>• Compulsory basic general education (8 years)</li> <li>• Intermediate education (3 years)</li> <li>• Higher education</li> </ul>
Chile	Compulsory basic general education (8 grades) Intermediate education (4 years) Higher education
Colombia	Preschool (1 compulsory grade) Compulsory basic education (9 grades) in two cycles: <ul style="list-style-type: none"> <li>• Primary (5 grades)</li> <li>• Secondary (4 grades)</li> </ul> Intermediate education (2 grades) Higher education
Costa Rica	Compulsory basic general education with a diversified third cycle (9 years) Diversified education cycle (2 or 3 years)
Dominican Republic	Primary education (8 grades) Intermediate education (4 years) in two cycles
Ecuador	Primary education (6 grades) Intermediate level (5 years): <ul style="list-style-type: none"> <li>• Compulsory basic cycle (3 years)</li> <li>• Diversified cycle</li> </ul>

Mexico	Basic education: <ul style="list-style-type: none"> <li>• Preschool education</li> <li>• Compulsory primary education (6 years)</li> <li>• Secondary education:  <ul style="list-style-type: none"> <li>Compulsory basic intermediate (3 years)</li> <li>Higher intermediate or Baccalaureate (2 or 3 years diversified)</li> </ul> </li> </ul> Higher education
Paraguay	Primary education (6 years) Intermediate or diversified level (6 years) <ul style="list-style-type: none"> <li>• Compulsory common cycle (3 years)</li> <li>• Diversified cycle (3 years)</li> </ul>
Peru	Primary education (6 grades) Compulsory secondary education (5 years) <ul style="list-style-type: none"> <li>• Common cycle (2 years)</li> <li>• Diversified cycle (3 years)</li> </ul>
Uruguay	Primary education (6 grades) Compulsory single basic cycle (3 years) Diversified Baccalaureate (3 years)

Source: Based on national documentation and Braslavsky, 1995.

TABLE 2. Gross school attendance rate in 1985 and 1995 at intermediate level (lower and upper secondary) in selected Latin American countries

Country	1985		1995	
	Number of years	Gross rate	Number of years	Gross rate
Argentina	5	70	5	77
Bolivia*	4	39	4	–
Brazil**	3	35	3	45
Chile	4	67	4	69
Colombia	6	48	6	67
Costa Rica	5	40	5	50
Dominican Republic	6	51	4	41
Ecuador	6	58	6	50
Mexico	6	57	6	58
Paraguay	6	31	6	38
Peru	5	63	5	70
Uruguay	6	71	6	82

Source: UNESCO, 1998.

\* Data prior to structural reform: seven years of primary school plus seven of secondary school

\*\* Upper secondary

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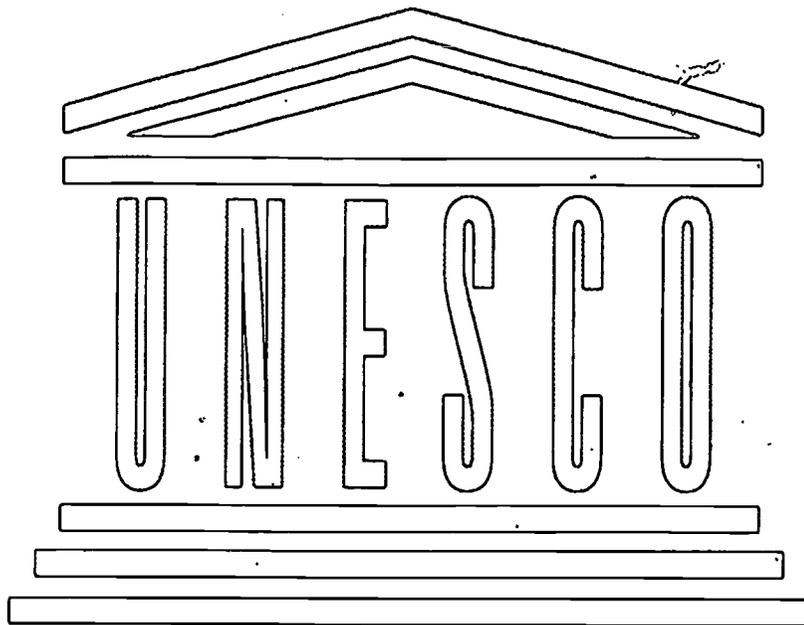
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