
seminarios y conferencias

Investing better in order to invest more. Finance and management of education in Latin America and the Caribbean

Economic Commission for Latin America and the Caribbean (ECLAC) and
United Nations Educational, Scientific and Cultural Organization (UNESCO)



Santiago, Chile, January 2005

This document was prepared by the Social Development Division from the Economic Commission for Latin America and the Caribbean in conjunction with OREALC Office -Santiago from the United Nations Educational Scientific and Cultural Organization (UNESCO) to be presented at the 30th Session of ECLAC held in San Juan, Puerto Rico from June 29 through July 2, 2004.

This document has been reproduced without formal editing.

United Nations Publication
ISSN printed version 1680-9033
ISSN online version 1680-9041

ISBN: 92-1-121532-3
LC/L.2246-P
Sales No.: E.05.II.G.4
Copyright © United Nations, January 2005. All rights reserved
Printed in United Nations, Santiago, Chile

Applications for the right to reproduce this work are welcomed and should be sent to the Secretary of the Publications Board, United Nations Headquarters, New York, N.Y. 10017, U.S.A. Member States and their governmental institutions may reproduce this work without prior authorization, but are requested to mention the source and inform the United Nations of such reproduction.

Content

Summary	7
Preface	9
I. The setting	11
A. Education for development and the situation of Latin America and the Caribbean	11
B. Country efforts	17
1. Increased spending and commitment to reforms	17
2. Demographic bonus for education	20
C. Country commitments	22
D. The challenges	24
1. Broadening access to education, permanence in the system, and course conclusion	24
2. Guaranteeing quality of education with social impact	24
3. Guaranteeing quality of education in its diverse dimensions	25
4. Improving the efficiency of education systems	25
E. Closing the gaps	26
II. Financing	29
A. Education goals and financial resources necessary for their attainment	29
1. Introduction	29
2. Goals, gaps, and missing resources	30
3. Universal pre-primary education	33
4. Assuring universal coverage of the primary cycle	35
5. Raising the coverage of secondary education to 75%	36
6. Eradicating illiteracy among young people and adults	38

B.	Mobilization of additional resources to close gaps between countries and to move towards fulfilment of educational goals.....	42
1.	Ability of countries to self-finance progress toward the education goals	42
2.	National public resources	45
3.	National private resources	50
4.	External resources	53
III.	Management.....	67
A.	Management assessment: Why and what for?	67
B.	School management at the service of learning.....	69
1.	Structural problems of school management	69
2.	Opportune use of resources and time	70
3.	Decentralization and its impact on learning.....	71
4.	Resource allocation policies and equity	74
5.	Information and knowledge for improving management.....	76
6.	Capacity to manage international cooperation	78
C.	Social responsibility for education.....	78
1.	Participation of parents and the education community	79
2.	The concept and application of accountability	79
3.	Responsibility of ministries of education for education outcome	80
4.	Social responsibilities of universities in education change	81
5.	Social responsibilities of finance ministires and of legislatures for major changes in education and the resources necessary to carre them out	82
6.	Social responsibility of teacher unions.....	82
D.	Schools and learning and participatory communities	83
1.	The role of schools	83
2.	School management	83
3.	Regarding school principals	85
4.	Public/private school combinations.....	85
E.	Teachers and their active participation in changes in education.....	88
1.	Changes are not possible without good teachers	88
2.	Investing only in training versus Investing in the professional and human development of teachers.....	89
3.	Teacher development is not only a problem of ministries of education and of unions	89
4.	Education reforms with the transformation of and investment in the initial training of teachers	89
5.	In service training for current needs vs. training within an integrated professional development system.....	90
6.	The quality of life of teachers and recognition of the value of their profession influence student learning	91
7.	The work of teachers and its assessment: promotion through time in service, or through professional development?	91
8.	Salary increases vs. salary policy within a framework of new working conditions... ..	92
9.	Stimuli and incentives for teachers begin with a comprehensive policy.....	94
10.	Social conflict and the fragile governability of education systems	95
11.	Strengthening the active participation of teachers in order to improve student learning and to guarantee changes in education	97
	Bibliography	99
	Annex	103
	Appendix 1- Methodological considerations regarding estimates of differences between countries and resources required for meeting the four proposed goals	105

A.	Reducing differences between countries: The criterion of cost convergence.....	105
B.	Assumptions adopted for the estimate	106
Serie Políticas Sociales: Issues published		107

Tables

Table 1	Enrolment in secondary and higher education 1985-1997.....	15
Table 2	Relative position of Latin American countries in international studies of the quality of education.....	15
Table 3	Latin America (22 countries): Overall estimate of total and additional costs involved in order to achieve the four education goals by 2015	32
Table 4	Latin America and the Caribbean (22 countries): Costs for achieving universal coverage of pre-school education by the year 2015.....	34
Table 5	Latin America and the Caribbean (22 countries): Costs for achieving universal coverage of primary education and achieving at least 5 primary grades by the year 2015.....	37
Table 6	Latin America and the Caribbean (22 countries): Costs for increasing access to secondary education to 75% by the year 2015.....	40
Table 7	Latin America and the Caribbean (22 countries): Costs to eradicate adult illiteracy by 2015	41
Table 8	Latin America and the Caribbean (22 countries): Total resources necessary in order to reach the four education goals by 2015 and budgetary deficit resulting from maintaining the macroeconomic priority of public spending on education	44
Table 9	Latin America and the Caribbean (22 countries): Public expenditures for education and public debt servicing 2000.....	56
Table 10	Public debt trends.....	57
Table 11	International cooperation contribution to education in Latin America and the Caribbean	62
Table 12	Number of year of post-secondary education required for teacher certification, by education level, 1999	90
Table 13	Teacher salaries in public primary schools. OECD countries and Latin America, 2000.....	93
Table 14	Teacher salaries in public lower secondary schools. OECD countries and Latin America, 2000	93
Table 15	Teacher salaries in public upper secondary schools. OECD countries and Latin America, 2000	94
Table 16	Days and resources lost due to teacher work stoppages	96

Figures

Figure 1	Acumulated per-student spending (PPC dollars) and education performance on a combining readingcomprehension scale	16
Figure 2	Per captia income (PPP dollars) and student performance on a combining readingcomprehension scale	17
Figure 3	Latin America (18 countries): Changes over time in per capita public spending on education.....	18
Figure 4	Latin America (22 countries): Trends for spending on education as a proportion of GDP	19
Figure 5	Percentage of growth of Latin America and the Caribbean, by sex and age (2000-2010).....	21

Figure 6	Latin America and the Caribbean: Year in which demographic bonus will end, country.....	22
Figure 7	Costs related to repeating students	47
Figure 8	Tax burden in Latin America (excludes social security contributions).....	49
Figure 9	Latin America and the Caribbean (11 countries): and North America (2 countries): Private spending for schooling as a percentage of total public and private spending, 2000.....	51

Summary

The reforms being undertaken by all the countries in the region (although with varying emphases and intensity) with a view to promoting a leap forward in quality and equity in education are all, generally speaking, focused on transforming various parts of the system: teaching and learning processes and content; financing of the system and resource allocation mechanisms; the distribution of functions between the State and private enterprise; decentralization of management, and, in some cases, education planning; monitoring of the quality of education services through review of teaching practices and assessment of outcomes; and the beginnings of an attempt to adapt curricula to students' social and cultural conditions and to the requirements of the workplace.

It is undoubtedly important to prioritize changes in education according to their impacts on student achievement because this makes it possible to realign investments in education in order to optimize their effectiveness. If the reforms have not produced all the expected benefits in terms of quality, equity or efficiency, then it becomes essential to assess past reforms, identify their successes and failures and, on that basis, modify reform paradigms in order to optimize the impact of additional resources. The point is not simply to invest more, but also to invest better.

In order to assess countries' financing needs for education, the present publication includes estimates of the total and additional costs that countries will need to cover between now and 2015 in order to achieve the following four major targets for educational progress agreed upon by the Governments of Latin America and the Caribbean as set forth in the Millennium Declaration, Education for All (EFA),

Regional Education Project for Latin America and the Caribbean (PRELAC) and the Summit of the Americas of 1998: achieving universal enrolment in primary education, ensuring universal completion of primary schooling, raising the net coverage of secondary education to 75% and eradicating adult illiteracy. On the basis of the financing shortfalls thus identified, the study looks at sources of funding that have not been sufficiently explored, such as contributions from the private sector and civil society, international cooperation and swapping debt servicing for investment in human capital.

In addition, some of the main problems and challenges associated with improving the management of education are analysed with a view to determining how to ensure that resources invested in the education system are used more efficiently and have a greater impact on educational achievement and learning. These areas include placing school management at the service of learning; promoting greater social responsibility for education among providers, users and their families; assigning the school a special role in its management as a participatory learning community; and improving, as a matter of urgency, educational human resources and encouraging teachers to actively participate in and make a commitment to effective learning by their students.

Preface

The present document is the result of a joint effort carried out by ECLAC and UNESCO. Its objective is to present the major financing and management challenges currently presented by education systems in Latin America and the Caribbean at the beginning of the XXI century.

Almost thirteen years after publication of the document presented by both institutions to the governments of the region at the 24th Session of ECLAC held in Santiago, and which treated the renewed role of education in development based on economic change with equity (ECLAC-UNESCO, 1992), they once again come together to begin a new joint effort.

This publication represents the beginning. It was presented for the consideration of the countries at a forum which brought together education and finance authorities of the governments of the region in this 30th Session of ECLAC in Puerto Rico (July 2, 2004). Given that the financing and management of education that brings together considerations of both education, finance, and economics, it is extremely pertinent to promote a dialogue between authorities responsible for these areas.

ECLAC and UNESCO do not intend with this document to present definitive criteria and proposals. Rather, in these pages we seek to foster discussion and debate. It presents some of the principal points that currently concern those who seek to establish more efficient and effective education management with clearer impacts on the quality, equity, and pertinence of education systems so that the financial and technical efforts of countries can produce

substantive improvements in the learning and educational achievements of future generations. The information here presented seeks to make possible examination of the financial viability of different countries of the region to meet a series of goals by 2015 regarding educational achievement that the countries themselves have agreed upon in different international forums, agreements, and declarations. To this end, the document also examines complementary sources of financing and new forms of management that can aid in accomplishing reforms in order to move toward meeting the goals in question.

I. The setting

A. Education for development and the situation of Latin America and the Caribbean

Development should be based on ethical principles according to which society should provide its members with increasingly equal opportunities to ensure their well-being, and progressive access to the minimum skills needed for all citizens to make independent decisions on their life projects. As stated by ECLAC at the turn of the century, development should “seek to create a social and human climate of greater security and mutual trust, to consolidate a democratic political system that provides for greater participation by the public in government management and decision-making, to enhance the well-being of those who have the least access to the benefits of modern society, to give rise to collective undertakings in which the citizenry has a greater commitment and sense of belonging to the society in which its members live, and to protect and improve the natural habitat for those who dwell in it today and for those who will do so tomorrow” (ECLAC, 2000a, p 31 – 32).

For the countries of Latin America and the Caribbean, this requires progress towards more equitable societies in order to prioritize “the populace's civil and political rights, which include the individual's rights to exercise autonomy in relation to the power of the State and to participate in public decision-making, and economic, social and cultural rights, which are based on the values of equality, solidarity and non-discrimination” ECLAC, 2000a, p 29). If progress is not made in

the furtherance of second-generation rights (economic, social and cultural), first-generation rights (civil and political) are rendered meaningless and unreal for less educated or less informed sectors of the population. Hence "these two sets of rights are what provide a genuine ethical frame of reference for economic and social policy and for the management of political affairs" (ECLAC, *ibid*).

Every person's right to education is the key to progress in first- and second-generation rights, since it increases the possibilities of access to employment, healthcare, nutrition and the necessary income for ensuring well-being, and prepares people to exercise their civil and political rights. Every person's right to education is stipulated in a wide range of international legal instruments such as the Universal Declaration of Human Rights, International Covenant on Economic, Social and Cultural Rights, Convention on the Elimination of All Forms of Discrimination against Women, Convention on the Elimination of All Forms of Racial Discrimination, Convention on the Rights of the Child and other international treaties signed by countries of the region. This confers on every woman, man, youth and child the right to access compulsory basic education and egalitarian access to available secondary and higher education, the right of all people to access continuing education and professional training and the right to information on health, nutrition, reproduction and family planning. The right to education for all is also a vital path towards accessing other fundamental human rights. Education is therefore a public good that the State, as guarantor of the commitment to respect and promote rights, should provide to all members of society, ensuring full access and appropriate quality.

There is wide recognition of the contribution of education in the ethical, social, economic, cultural, and political dimensions of personal development. In this sense, for more than a decade ECLAC and UNESCO have argued that education is the key for assuring economic development with social equity, providing bridges for communication in multi-cultural societies, and for strengthening democracies based on the broad exercise non-exclusionary exercise of citizenship.

Although the central importance of education for development is not new, it has acquired new force in recent decades, given the changes generated by globalization, new productive standards, and its recognized importance for information and knowledge as well as due to the need to train citizens in the ethic of human rights and to prepare them for democratic participation. These realities emphasize the need to educate human beings able to participate in new forms of producing, participating, and living together.

On the economic plane, increased international trade and the move toward what is termed the information society means that societies increasingly depend on their ability to compete internationally and thus on the incorporating intelligence and newknowledge into the economic system. Development thus requires rapid major changes in education. The links between formal education and challenges of the labor market increasingly touch upon questions that determine future growth and well-being. For more than a decade, ECLAC and UNESCO have argued that "by converting knowledge in a key element of the new economic paradigm, changes in education have become a key factor in developing capacities for innovation and creativity, while at the same time, integration and solidarity become key aspects both for the exercise of modern citizenship as well as to achieve high levels of competitiveness."¹

On the social plane, societies with high educational achievement among the majority of the population tend to have more equalitarian income structures, due to both the employment benefits of education as well as because of the positive impacts of education on health, network

¹ ECLAC-UNESCO, 1992, p. 119. And in the same sense: "The dissemination of values, the ethical dimension, and behaviors of modern citizenship as well as the generation of skills that are indispensable for international competition (increasingly based on technical progress), receive decisive support from education and from the production and dissemination of knowledge within society. Economic reform and dissemination of knowledge are therefore crucial instruments for facing both the domestic challenge of citizenship as well as external challenges of competition. It is therefore this dimension which is central for the proposal of ECLAC-UNESCO regarding economic change with equity". (*Ibid.*, p.17).

connectivity, and access to levels of decision-making. This is especially critical in Latin America and the Caribbean, as it is the region with the most inequitable distribution of income in the world. Highly educated societies also tend to have greater social cohesion and to base their economic growth on improvements in productivity rather than on over-exploitation of natural or human resources.

Furthermore, education is the best means of overcoming poverty. First because major educational progress generates appreciable intergenerational returns, given the very significant effect of parents' educational level (especially mothers') on the educational performance of children. This path to improving the educational climate of the home (whose future heads are currently in school) produces a favourable effect on the educational performance of the children and young people of the next generation, reduces drop-out and grade repetition rates and increases the number of years of schooling completed, while allowing students to be in the grade appropriate for their age. Second, there is a clear correlation between increasing education among poor women and better health conditions for their families in the future, since women's schooling is a determining factor in reducing infant mortality and morbidity, improving family health and nutrition and bringing fertility levels down. Education also makes social and occupational upward mobility possible for those coming out of the educational system. The higher the level of formal schooling, the lower the probability of remaining poor or falling into poverty. Education is the main path not only for overcoming poverty but for overcoming the structural factors that cause it: low work productivity, scant access to the tools of modern life, social and cultural marginality, vulnerability to health problems at the family level, and low educational achievement or dropping out of school on the part of young people (ECLAC, 2000c).

There is now widespread consensus, both in the literature of development and in political debate, regarding education as a catalyst to economic buoyancy, social integration and poverty eradication. From this perspective, education not only contributes to productivity through the training of human capital, but has a civic and liberating function as well.² Over the question of what kind of development we wish to have is superimposed that of the type of education that we are able to offer and to disseminate.

It is no surprise, therefore, that both governments and the international community wish to move resolutely toward greater educational achievement and pertinent learning. In order to do so, major changes are required that involve modernizing the management of our education systems, seeking services of higher quality, greater pertinence and more equal access in order to guarantee higher achievement for the entire population. This will require filling major gaps in financial, human, and physical resources; not an easy task by any means.

According to recent studies, including the assessment of the Major Project of Education carried out by UNESCO, education in Latin America and the Caribbean faces great problems in regard to learning. The indicators are clear, and show major shortcomings and inequalities. Our progress has been slow in regard to the quality of learning and, in many countries of the region gaps are very wide in regard to the kind of educational achievement needed for training human capital and reducing poverty. School failure and interrupted studies reproduce and sustain social inequality while at the same time eroding the efficiency of education systems. Although on average, new generations achieve higher educational levels than in the past, within each generation notorious education achievement gaps persist in terms of income, social class, ethnicity, and geographic location of students.

The situation by level of education varies between countries. Net enrolment rates in primary education in the region increased from 89% in 1990 to 94% in 2001, thus suggesting that coverage

² The so-called "Pillars of Learning for the XXI Century" defined by UNESCO within the commission led by Jaques Delors, offer an excellent guide for questioning the meanings and contents of education: learning to be, learning to do, learning to know, and learning to live together.

at this level is now practically universal (World Bank. *Ed.Stats*)³ In most countries, net enrolments rates for primary education for the 2001 school year were between 85% and 100%. With the exception of Haiti we note that there was high coverage, although many countries, although having improved their enrolment rates, still are far from the goal of having 100% of students of primary school age in school.

The net primary schooling rate for the 8 year-old population is at 96.3% in the region, although pre-school enrolments account for only one-half of the children of the age to attend. There are marked differences between countries in Latin America, ranging from 97% to 21%. Of 19 Latin American countries, 12 present rates of less than 50%. Six countries are at less than 40% for the pre-school level (UNESCO, 2003).

In many cases, completion rates for students between the first and fifth grades of primary education are markedly low. This suggests high rates of drop-out and school failure.⁴ There are also marked differences between countries in indicators of urban and rural access to and permanence in primary education. Progress must be made in these areas by revising current education models and adding new resources to those now spent by these countries. Moreover, countries face serious problems of school drop-out between primary and secondary education and during the secondary level.

This is even more serious if we consider that in terms of the relation between education and well-being, ECLA stated over a decade ago that between 11 and 12 years of formal education are required in order for a person to have a good chance to escape or to avoid poverty through access to employment that offers sufficient income. Nevertheless, in the region 40% of children do not finish primary school, and between 72% and 96% of poor families have heads of households with less than 9 years of formal education, while 80% of urban youth have parents with less than 10 years of formal education. This makes it unlikely that these youth will achieve education levels required to avoid poverty (ECLAC, 2000).

School attendance differences between quartiles at income extremes (the 25% poorest and the 25% wealthiest) increased in all Latin American countries during the last decade. This is very serious, given that the data show a positive correlation between more education and more equity; that is, countries with higher and better distributed school achievement also have smaller income gaps and are more egalitarian in social structure.

Although most Latin American and Caribbean countries are moving toward universal coverage of primary education, participation and graduation rates for the secondary level —where employment skills are developed— are much lower. For secondary education, net enrolment rates for 2000/2002 varied between 26% in Guatemala and 36% in Nicaragua (percentages that represent the lowest values in the region) to figures above 70% and 80% in Barbados, Cuba, and Jamaica in the Caribbean and Argentina, Chile, Mexico, Peru, and Uruguay in Latin America.⁵

The question is whether such heterogeneity, such great differences in rates of progress between countries of the region are inevitable. The answer is that they are not. This can be seen when we compare Latin America with OECD member countries and those in Southeast Asia, where schooling growth rates show very different behavior. It may be noted in this regard that between 1985 and 1997 the relation between recently-industrialized Southeast Asian countries and those of Latin America and the Caribbean was reversed, with the former having higher gaps and in these 12 years were able to attain comparably better progress in terms of progression within their education systems —not only in enrolments but in performance in standardized tests by level, number of

³ Available at: <http://devdata.worldbank.org/edstats/cd5.asp>.

⁴ The 2003 EFA Regional Monitoring Report (UNESCO 2003) notes that conclusion of primary school is still a goal to be attained. The percentages of the 15-24 year-old population with six or more years of schooling are not heartening. Values of between 50% and 60% in some countries and above 95% in others are proof of marked disparities in the region.

⁵ At the Summit of the Americas in 1998 countries set as a goal for 2010 attaining a 75% enrolment rate in secondary education.

effective class hours per year and in other indicators. During the same period, the OECD countries, which had a much better initial situation than those of Latin America, progressed even further and at a faster pace. Currently, in OECD countries 85% of young people complete secondary studies, while in Latin America and the Caribbean less than one-third of young people attain this level (see table 1). Latin America and the Caribbean also are behind in the duration of secondary education (which is shorter in the region than among other groups of countries) and in the years of compulsory schooling.

There are also differences between Latin American students and those in industrialized countries in the quality of learning of mathematics and in the mastery of language as measured by achievements on standardized tests in reading, mathematics, and sciences, with our countries showing a clear disadvantage. The following table presents the results of tests that measure learning in language and mathematics, and clearly illustrates the inferior position of Latin American countries included in the tests in comparison with OECD and Southeast Asian countries. Closing this gap is even more of a challenge when one considers that industrialized countries, which have 25% of the world's students, spend six times more per inhabitant to train human capital than do developing countries in which the remaining 75% of students live (Brunner, 1999, p. 2). Added to these difficulties are the social inequalities, curricula that is inadequate to diverse cultural contexts, high illiteracy rates in some countries, and a high percentage of young people and adults with an incomplete primary education.

Table 1
ENROLMENT IN SECONDARY AND HIGHER EDUCATION, 1985 - 1997

Groups of countries	Gross enrolment rates (%)					
	Secondary education			Higher education		
	1985	1997	Increase (%)	1985	1997	Increase (%)
Latin America and the Caribbean	50.2	62.2	12.0	15.8	19.4	3.6
OECD countries	92.3	108.0	15.7	39.3	61.1	21.8
NIAE ^a countries	57.3	73.1	15.8	14.8	30.5	15.7
East and Southeast Asia ^b	41.5	66.3	24.8	5.4	10.8	5.4

Source: B. Carlson, based on information in UNESCO, World Education Report, 2000.

^a Recently-industrialized Asian economies: Hong Kong, Republic of Korea, Singapore, China, Malaysia, and Thailand.

^b Developing countries including Newly Industrialized Asian Economies (NIAE).

Table 2
RELATIVE POSITION OF LATIN AMERICAN COUNTRIES IN INTERNATIONAL STUDIES OF THE QUALITY OF EDUCATION

Study	Participating countries	Ibero-American countries	Relative ranking
L.A. LABORATORY 1997	13	13	Average scores for the top-ranked country between 1.5 and 2.0 standard deviations from the other 12 countries 31, 37, & 40
TIMSS 1996	41	3	35
TIMSS 1999	38	1	19 & 22
IALS 1998	22	2	33, 35, 36, 37, & 41
PISA 2000	41	5	

Source: Latin American Laboratory for Assessment of the Quality of Education, LLECE, OREALC/ UNESCO Santiago), International Association for the Evaluation of Educational Achievement (IEA), The Third International Mathematics and Science Study of TIMSS (Trends in International Mathematics and Science Study), Organization for Economic Cooperation and Development (OECD), "International Survey of Adult Education", and OECD, "PISA, Program for International Student Assessment".

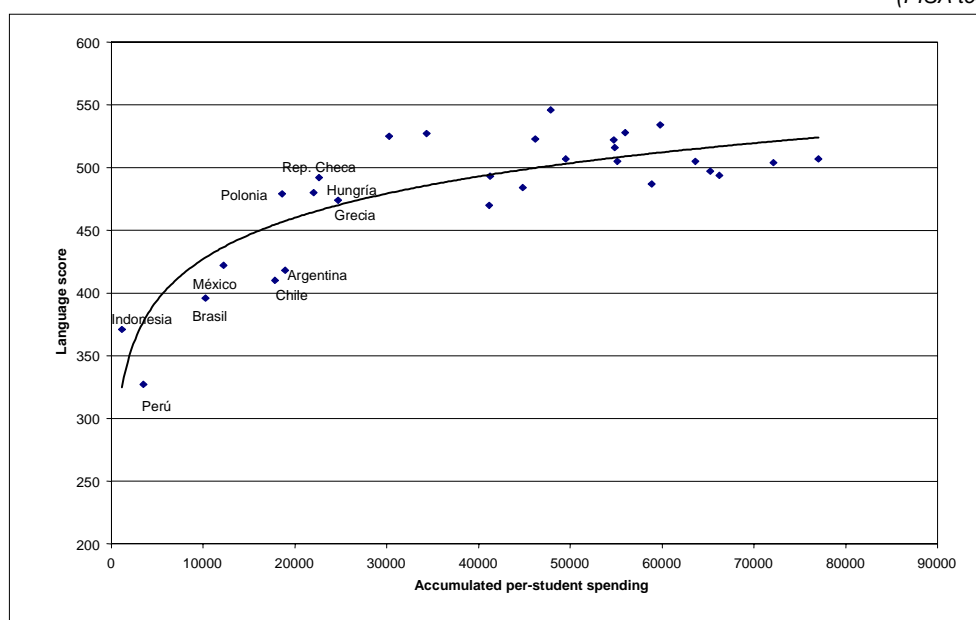
Among the 41 countries participating in the PISA study, no Latin American country placed higher than 33rd. Of even more concern is the fact that the percentage of students of these Latin American countries with reading skills lower than the limit established as "Level 1" varies between

10% and 54%. If a person does not attain Level 1, this means that he or she does not possess the reading skills necessary to carry out the most simple tasks such as, for example, understanding how to follow instructions for preparing a baby's bottle.

In an inter-regional comparison, the Latin American Laboratory for Assessment of the Quality of Education coordinated by OREALC/UNESCO-Santiago assessed student achievement in the third and fourth grades. The study showed that Cuba stands out among all of the countries of the region for student achievement in both language and mathematics⁶. When one analyses the results of the other countries, one sees that in language achievement the results of Chile, Argentina, and Brazil were approximately equivalent and better than those of the other countries. Honduras and the Dominican Republic had the lowest scores. In mathematics, country results, with the exception of Cuba, were more similar than for language, although it is possible to distinguish a group with relatively poorer performance composed of Paraguay, Honduras, Colombia, the Dominican Republic, Peru, and Venezuela.

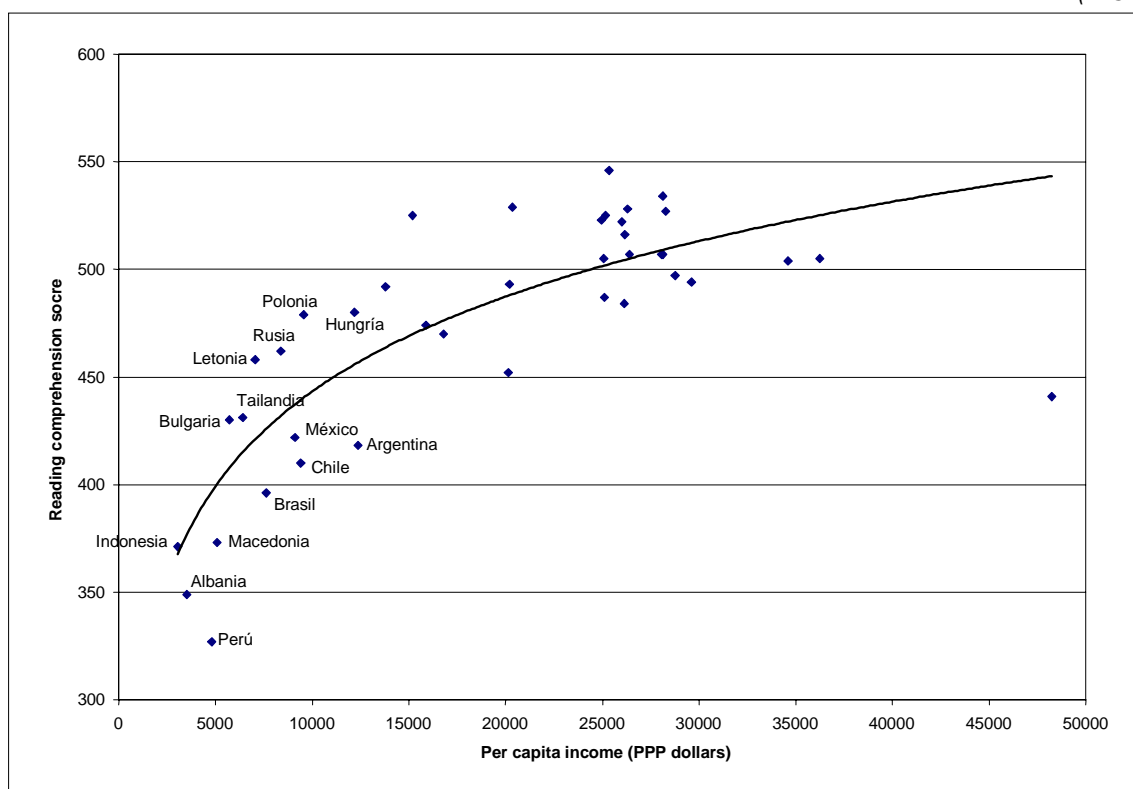
When one compares learning results with per-student spending it becomes clear that there is a positive relation between the two. figures 1 and 2 are very illustrative in comparing the results of the PISA study. Moreover, one may note that there are countries which, with per-student spending equivalent to some countries of the region, attain significantly higher scores, showing that the correlation between investment and learning is strong, but not absolute. On the other hand, the general cultural level of a country, the degree of equity of access to quality education, and the "past accumulation" of school-based learning may influence results. Even so, it appears that there is room for intervention for optimizing available resources. Hence, the importance of improving education system management and of not merely injecting additional resources. In a broader context such as that represented in figures 5 and 6 which show reading comprehension achievement levels for 15 year-olds in the PISA test, the performance of participating Latin American countries is problematic.

Figure 1
ACCUMULATED PER-STUDENT SPENDING (PPC DOLLARS) AND EDUCATION
PERFORMANCE ON A COMBINING READING COMPREHENSION SCALE
(PISA test)



⁶ Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Honduras, Paraguay, Peru, the Dominican Republic, and Venezuela participated in the study. The results of Costa Rica were not published due to the fact that they were not delivered according to the time limit and standards established by those responsible for the measurement instrument.

Figure 2
PER CAPITA INCOME (PPP DOLLARS) AND STUDENT PERFORMANCE
ON A COMBINED READING COMPREHENSION SCALE
(PISA test)



In figure 1 the control variable used was accumulated spending per student, while in figure 2 the control variable was per capita income in dollars adjusted for purchasing power (in this last case there are more data available). One can see that the performance of Latin American students is below what would be expected if this were at the level for the best possible adjustment between performance and accumulated spending or per capita income reflected in the curve incorporated in each of the figures. Both figures show countries that, with similar levels of spending per student or per capita income, have student reading comprehension levels significantly superior to those of countries of the region. Moreover, Argentina, Chile, Brazil, and Mexico show similar results with significant differences in per-student spending. This suggests possible differences in the effectiveness of the school systems of the region.⁷

B. Country efforts

1. Increased spending and commitment to reforms

It is undoubtedly important to rank education changes according to their impacts on student achievement because this makes it possible to re-align investments in education in order to optimize their impacts. But it is equally important to remember that it is not sufficient to provide for greater efficiency and efficacy of public investment in education. Also important, as countries in the region have argued during their education reforms of the 1990's, is the commitments of governments to

⁷ One must be careful in analyzing these comparative results, given differences in sampling designs per country.

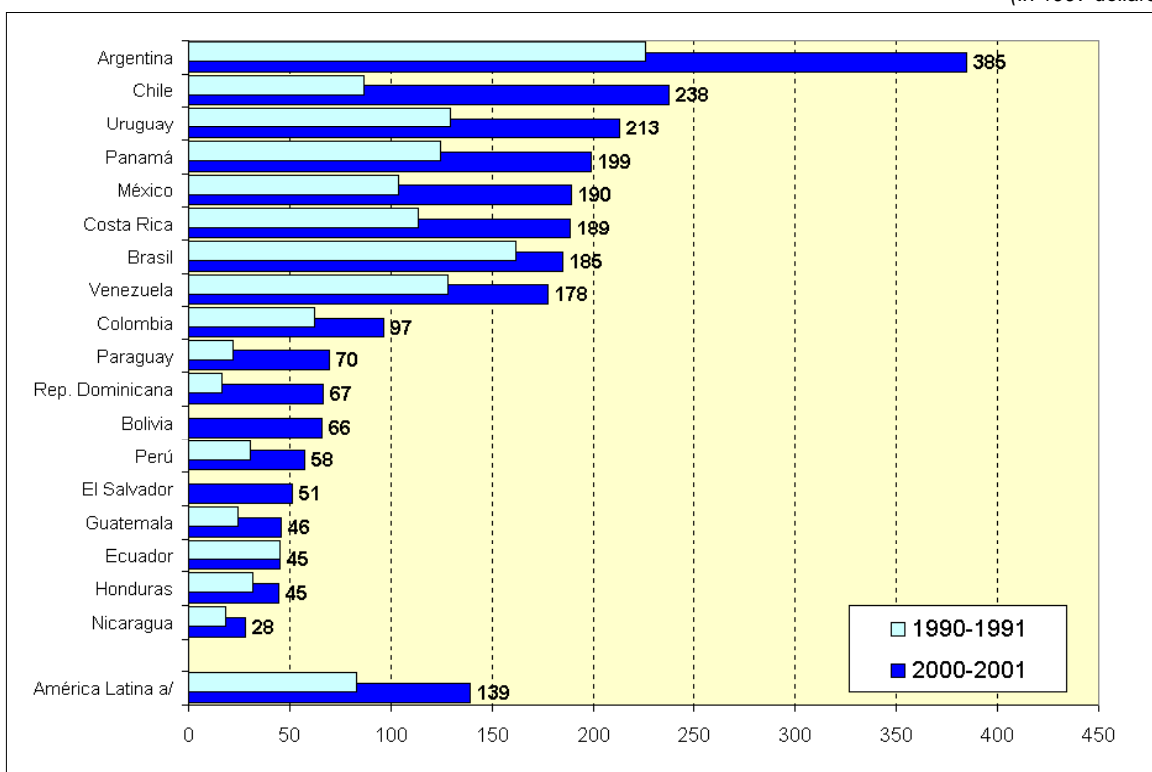
increase public investment in education, both in absolute terms as well as a percentage of GDP, and to improve and increase other sources of public and private resources.

In terms of the financial efforts of countries of the region, data generated by the Education Indicators Regional Project⁸ show that the 15 countries of the region for which information is available spend between 12% and 22% of total public spending on education (PRIE, Summit of the Americas, p. 65). The countries of Latin America and the Caribbean dedicate an average of approximately 4% of GDP on education. Eleven of the countries between 4% to above 7% of GDP in this sector (*ibid.*, p.61).

During the 1990s, countries increased their spending on education. As a regional total, this relative increase was approximately 1.1% of GDP during the previous decade (and average of 3.0% in 1990 and 4.1% of GDP in 1999). In 1997 dollars, annual spending per capita for social programs in the region in 1998-99 was US\$137, which represents a US\$51 increase compared to 1990-91 (see figure 3). This increase is high when compared to that for health (US\$28 per capita for the same period). But it is clearly insufficient when compared both in absolute terms with investments in education of the OECD countries as well as with what is required in order to reach education achievement and levels to have an impact on greater equality of opportunities and on advancements in competitiveness due to better trained human resources. This is even more the case when one considers that public spending on education is a meaningful variable (95%) for explaining attendance rates in primary and secondary education, but not of higher education.

Figure 3
LATIN AMERICA (18 COUNTRIES): CHANGES OVER TIME
IN PER CAPITA PUBLIC SPENDING ON EDUCATION

(In 1997 dollars)



Source: ECLAC, Social Development Division, Data base on public spending.

^a Corresponds to the 16 country average, excluding Bolivia and El Salvador.

⁸ Technical coordination by the Regional Information System -SIRI- of OREALC/UNESCO-Santiago.

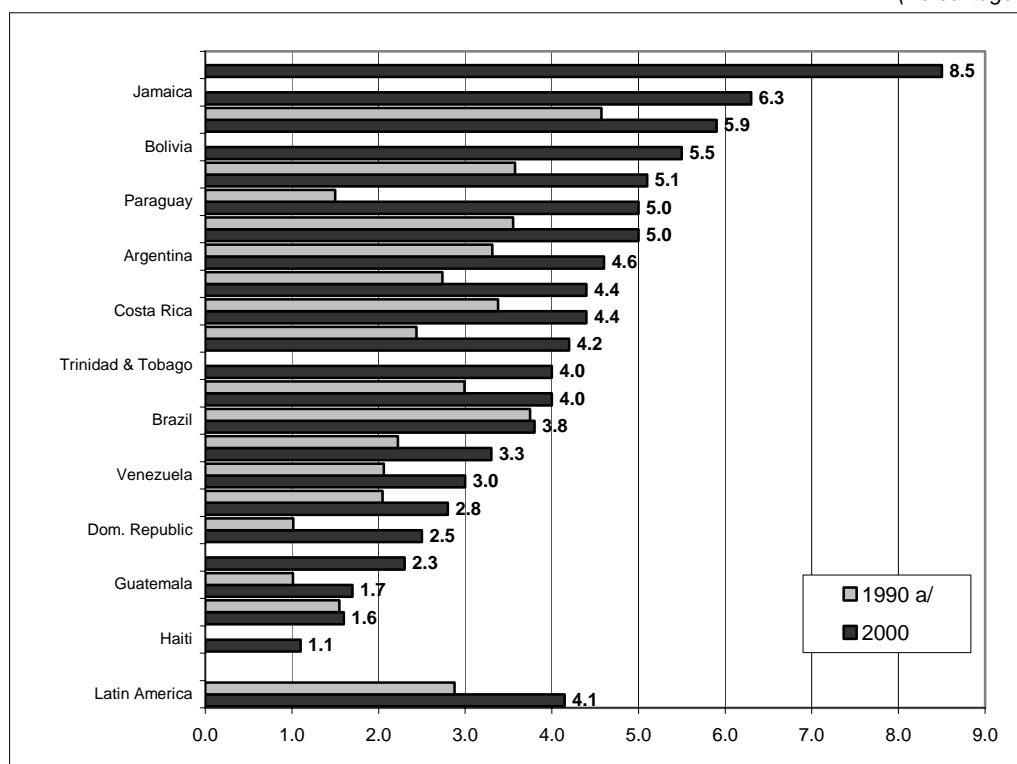
During the last decade, the countries of the region have made enormous efforts to make progress in educational achievement and to improve the quality of their systems. A clear example of this is the systematic increase in public spending for education. As we can see in figure 4, in terms of proportion of GDP, this spending increased to different degrees in all countries during the past decade. In four cases it exceeded the average of 5.5% of GDP invested by the OECD countries. In general, per capita public spending on education has maintained an upward trend since the beginning of the past decade in the region. This expansion in spending, even showing a contra-cyclic character in various countries at the end of the past decade during which economic growth slowed, is evidence of the clear political will of governments to lend continuity to carrying out their commitments.

However, this does not diminish the fact of the wide gap in per-student investment between the region and the OECD, given the enormous differences of GDP per capita between groups of countries. This is even more serious when we consider that those countries that need to advance most quickly and which are furthest behind are those which invest less on education (in absolute terms), given that their GDPs are lowest and have less capacity to manage additional resources. The irony is, of course, that sources are less available precisely where they are most needed.

Moreover, it should be noted that in almost all countries in the region, personnel costs represent between 70% and 90% of public spending for education, and between 90% and 95% of total public spending for education is for current spending. The rest is used principally for spending on infrastructure and basic equipment.

For this reason, additional financing —or marginal increases— are needed that can be directed at special programs to foster effective improvements in the quality and equity of education.

Figure 4
LATIN AMERICA (22 COUNTRIES): TRENDS FOR SPENDING ON EDUCATION AS A PROPORTION OF GDP
(Percentages)



Source: "Compendio Mundial de la Educación 2003. Comparación de las Estadísticas de Educación en el Mundo", Montreal 2003, Instituto de Estadística de la UNESCO (UIS).

^a Estimate based on changes through time of public spending on education during the 1990s reported by ECLAC.

The efforts of countries are not only expressed by increases in spending, but also by attempts to improve system management. In this sense, education reforms in the region have begun a process of changes, with varied emphases, but which in general seek to transform different parts of the system: content and processes of teaching and learning; financing of the system, and resource allocation mechanisms, the distribution of functions between the State and the private sector; decentralization of management, and, in some cases, education planning; monitoring of the quality of education services through review of teaching practices and assessment of outcomes; and the beginnings of an attempt to design curricula to better meet the needs of the social and cultural conditions of students and of requirements of the workplace. There has also been a clear concern during the last decade with in-service teacher training.

All of these components of current education reforms have sought to improve the quality of learning processes within primary and secondary education; to improve efficiency and efficacy in the use of resources for education, and, in various ways, to make access to quality education and high achievement more equitable. These latter objectives, as well as the efforts of reforms continue to be highly relevant for public policy.

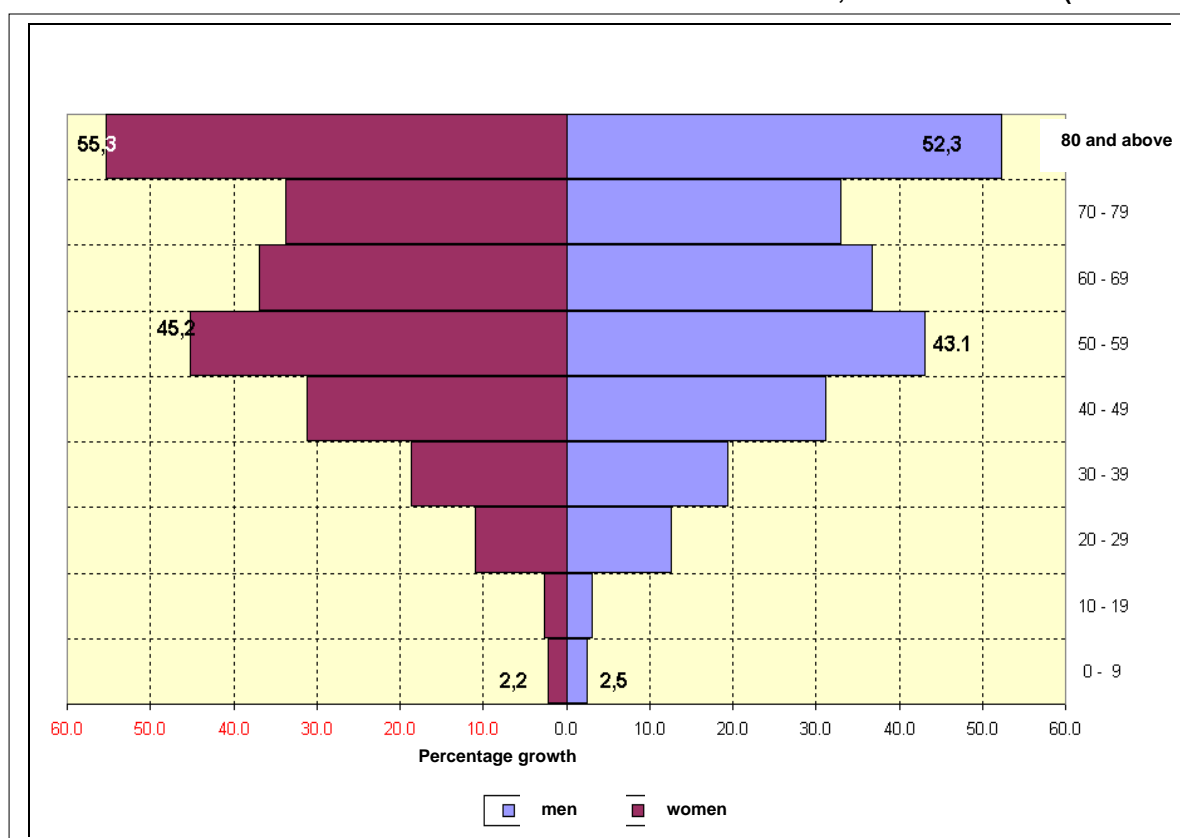
On the other hand, reforms have not produced hoped-for benefits. Proof of this is that to date, the above-cited standardized tests that measure student learning show little improvement in spite of management innovations and increases of investments in both public and private education. We are therefore at a decisive moment during which it is necessary to assess past reforms, identify their successes and failures, and then modify paradigms in order to optimize the impact of additional resources in terms of achievement, quality, equity, and pertinence.

2. Demographic bonus for education

Most countries in the region are experiencing their second demographic transition, which involves a considerable reduction in the proportion of children and young people within the population total. Children, who were the largest growing category in the mid-twentieth century, are part of a downward relative trend during the current decade (see figure 5). What is more, the decade beginning in 2040 will see a reduction in the absolute volume of all quinquennial age groups under 40.

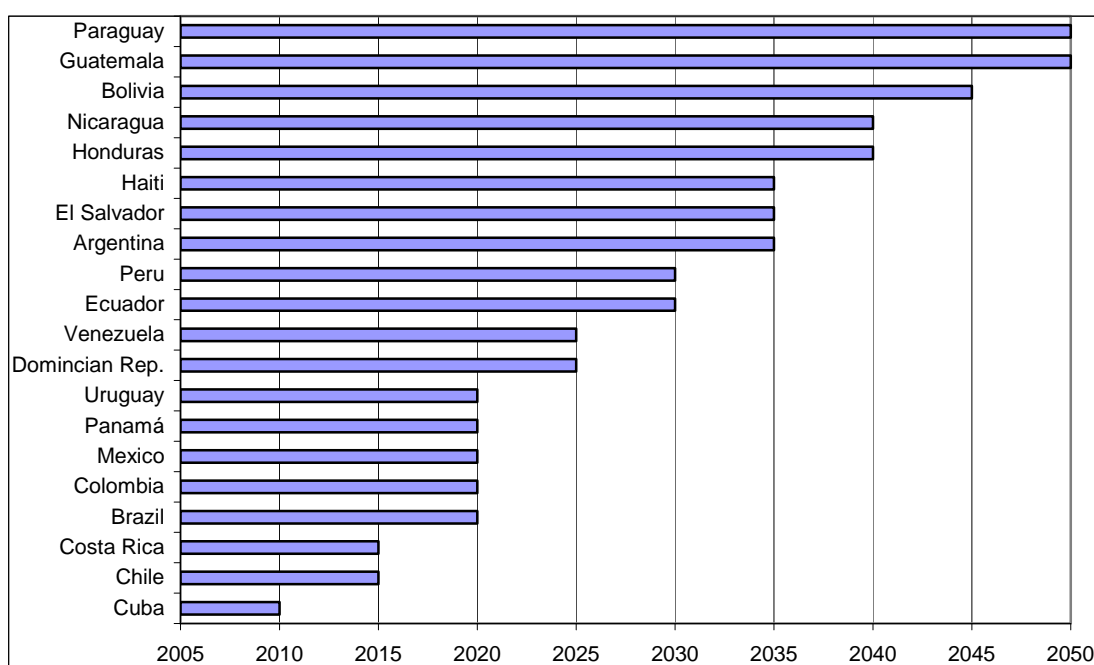
Reduced pressure from the demands of the child and youth population, which will be experienced in most of the region's countries, without a significant increase in the group of older persons (in absolute terms) results in what is known as the **demographic bonus**. This implies a situation in the age pyramid that is conducive to increasing social investment in education, which is specifically aimed at children and young people. If the positive trend of per capita education spending (increasing either as a percentage of GDP or by GDP growth) continues while the rate of increase of school-age population slows down, this will result in a vegetative increase in education investment per pupil. Countries should take advantage of this situation, given that the considerable growth of the older population does not require higher transfers to be made to that age group. The demographic bonus is not eternal, and its rhythms and opportunities therefore pose a policy challenge (see figure 6). As illustrated in figure 6, the countries with the most prolonged demographic bonus are also those that are the most lagging behind in terms of education, i.e. those that have the most progress to make to meet the targets put forward in this document. Nonetheless, to take full advantage of this demographic bonus in the interests of education, it is vital to intervene in good time. The demographic bonus is a positive change that can facilitate the achievement of the educational targets for 2015 detailed in the present document.

Figure 5
PERCENTAGE GROWTH OF LATIN AMERICA AND THE CARIBBEAN, BY SEX AND AGE (2000-2010)



Source: Calculations based on current population estimates and projections (www.cepal.org/cedade).

Figure 6
LATIN AMERICA AND THE CARIBBEAN: YEAR IN WHICH
DEMOGRAPHIC BONUS WILL END, BY COUNTRY



Source: Population Division of ECLAC – Latin American and Caribbean Demographic Centre (CELADE), current population estimates and projections.

C. Country commitments

Countries have repeatedly ratified their commitments to education as an unalienable right and as a requirement for development, and they have expressed their will to guarantee within specified periods access of their peoples to satisfactory levels of education. Article 1 of the World Declaration on Education for All (Jomtiem, Thailand, 1990), states that "Every person —child, youth and adult— shall be able to benefit from educational opportunities designed to meet their basic learning needs". This declaration reaffirms one of the postulates of the Universal Declaration of Human Rights, according to which "every person has a right to an education"⁹. Ten years later, the World Education Forum (Dakar, 2000) concluded that Education for All (EFA) is a still pending, but realizable goal.

At the regional preparatory meeting for the Dakar Conference, the countries of Latin America, the Caribbean, and North America meeting in Santo Domingo, the Dominican Republic, adopted the Regional Framework of Action of Education for All¹⁰. This framework sets terms for guaranteeing the continuity of efforts carried out by countries during the preceding decade and renews the commitments of countries to fulfill before the year 2015 the "universal right of all people to quality basic education from birth".

The Dakar Framework for Action proposes six objectives:

- expanding and improving comprehensive early childhood care and education, especially for the most vulnerable and disadvantaged children;¹¹

⁹ Article 26 of the Universal Declaration of Human Rights (1948)

¹⁰ Included in the EFA World Framework in Dakar, 2000.

¹¹ The following chapter sets the goal of 100% coverage of pre-school education in the region before the year 2015.

- (ensuring that by 2015 all children, particularly girls, children in difficult circumstances and those belonging to ethnic minorities, have access to and complete free and compulsory primary education of good quality;
- ensuring that the learning needs of all young people and adults are met through equitable access to appropriate learning and life skills programs;
- achieving a 50 per cent improvement in levels of adult literacy by 2015, especially for women, and equitable access to basic and continuing education for all adults;¹²
- eliminating gender disparities in primary and secondary education by 2005, and achieving gender equality in education by 2015, with a focus on ensuring girls' full and equal access to and achievement in basic education of good quality;
- improving all aspects of the quality of education and ensuring excellence of all so that recognized and measurable learning outcomes are achieved by all, especially in literacy, numeracy and essential life skills.

Education for All (EFA) has been conceived as a responsibility not only of governments or of international organizations, but as a task that demands the commitment of both the public and private sectors as well of the international community. This is strengthened by the commitment assumed in the year 2000 by 147 countries that subscribed to the Millennium Declaration¹³, in which they established a set of millennium development goals (MDGs) to be achieved by 2015. Important among these are goals in the field of education which coincide with EFA, assuring that by 2015 all children in the world complete primary education, achieve equal access to all levels of education, and to eliminate, preferably by 2005, gender disparities in primary and in secondary education. As we have mentioned, at the Second Summit of the Americas (held in Santiago, Chile, in April, 1998), the Chiefs of State and of Government adopted an Action Plan in Education which sets as one of its general objectives for the year 2010 that "at least 75% of young people have access to quality secondary education, with increasing percentages of young people who successfully completing their secondary studies".

Moreover, and with the participation of 34 countries of the region, Ministers of Education approved the Regional Education Project for Latin America and the Caribbean —PRELAC— (Havana, November, 2002) in order to foster substantive changes in education policies and practices in order to achieve the goals adopted by the Education for All Framework for Action of Dakar. PRELAC defines five strategic focuses for joint action of countries in the region. They are:

- Education Contents and Practices - constructing meanings in regard to ourselves, to others, and to the world in which we live;
- Teachers and Strengthening their participation in education change in order to satisfy student learning needs;
- The Culture of Schools - converting them into participatory learning communities;
- Management of Education Systems- making them more flexible and able to offer effective life-long learning opportunities;
- Social responsibility for education, generating commitments to its development and results.

¹² The following chapter sets the goal of 100% adult literacy in the region before the year 2015.

¹³ Guidance Note prepared by the United Nations Development Group, entitled, "Reporting on the Millennium Development Goals at the Country Level".

D. The challenges

Although the region has recorded significant progress within a generation in terms of average years of formal education, and in spite of the fact that education reforms have involved enormous efforts to improve education systems, pending challenges make it necessary to assess what has been accomplished, re-directing and increasing efforts in order to achieve more significant results. The social impact of education is based on four factors: access (with permanence in and conclusion of studies); quality; equity; and efficiency. All must be consolidated.

1. Broadening access to education, permanence in the system, and course conclusion

Since the 1980s, the main objective of countries has been to provide universal access to basic education. In spite of economic crises, between 1980 and 1996, education services were increased. This reflected considerable efforts in providing education for all, as well as being the fruit of investments during previous decades. Current basic schooling rates represent important advances achieved during a single generation. In Argentina and Brazil a child of five may now expect to complete an average of 16 years of schooling, while adults in these countries have an average of only eight years of schooling.

Besides universal coverage of primary school studies, there are three challenges related to coverage and to continuity. The first is to assure universal access of children 3-6 years of age to quality pre-school programs which can contribute to their general training and, as an indirect effect, improve education outcomes at the primary level. The second challenge is to foster access adolescents to secondary school and to assure their permanence within this level so they may complete 12 years of schooling. Finally, it is necessary to make formal education offerings more flexibility in order to facilitate pertinent content to young people and adults within a perspective of life-long education, including literacy training. The resources required by countries in order to accept these challenges and to meet proposed goals will be assessed in the following chapter.

2. Guaranteeing quality education with social impact

During the 1990s, States concentrated efforts on proposing long-term policies through reforms that had as their basic goal to improve the quality of educational services. The governments of Latin America and the Caribbean committed themselves to improving the quality of education outcomes. In general, the reforms that were carried out sought to diversify education services, create closer links between education and employment, take more global approaches, place a strong emphasis on inputs, the dissemination of new information and communication technologies, and participation of new actors, although these policies were carried forward with little effective participation of teachers in their definition. All of the above took place within a framework of a policy agenda of modernization of the State and decentralization of school management, including greater autonomy for individual schools along with greater responsibility of each school for learning outcomes.

Although national assessment systems were created in order to monitor this process, both the use and dissemination of the information they produce is still limited. The challenge is for countries to carry out profound changes in the critical structural factors that limit the quality of the education services they offer, and with the broad participation of teachers and communities to design strategies for improving the cultural pertinence of learning and to provide the skills necessary for living in an increasingly complex world.

3. Guaranteeing equity of education in its diverse dimensions

In educational terms, the average Latin American adult located among the 10% wealthiest in income distribution has seven years more years of schooling than an adult situated among the 30% poorest group (Hausmann and Szekely, 1999). The poorest decile of the population has a weighted average of 3.1 years of schooling, while the wealthiest decile has a weighted average of 11.4 years. This has a tremendous impact on social equity, given that the education level of parents has a great influence on the schooling level of their children. The data indicate that, on the average, the children of a parent who has never been in school, will study an average of only 3 years. If a parent has attained some level of higher education, his or her child will have an average of 13 years of schooling.

It should also be borne in mind that one of the main determining variables in the educational performance of pupils is the educational climate of the household, the principal factor of which is the educational level of the heads of household (Gerstenfeld, 1995). Educational inequity is therefore reinforced by social inequity, given that poor households are those where the heads of household have the lowest educational achievements. In the light of the close link between the educational and sociability conditions of poor families and communities, and the educational performance and continuity of their children and young people, various stakeholders need to be involved in a set of programmes aimed at gradually breaking the vicious circle. This combines targeting with the comprehensiveness of support measures, mainly in order to compensate for the deficient educational climate in poor families

The challenge is to guarantee that educational opportunities be distributed in an equitable manner among the entire population and at all levels of school, as well as to see to it that expansion of the highest levels of education does not occur while sacrificing high quality universal primary education. Equity continues to be a pending social debt, given the persistence of an enormous social gap in the provision, participation, completion, and results of learning.

In spite of the efforts of some governments in the region to mitigate the impacts of poverty and social exclusion through education, there are still many pending challenges. These include, on the one hand, guaranteeing that educational opportunities are distributed more equally at all levels of the system, avoiding class, gender, ethnic, or territorial discrimination. On the other, we must foster the learning of social skills in order to imbue students with an ethical commitment to justice and equality of opportunities. The contribution of education to social equity involves not only improving chances of access to the system; education also must develop in children, young people, and adults attitudes of solidarity and of responsibility for others.

4. Improving the efficiency of education systems

The efficiency of education is measured by the degree of optimization of resources to raise education levels and of effective learning of the population. In regard to the former, clear signs of inefficiency are high rates of grade repetition, late entry, and school drop-out. In spite of a slight decrease in grade repetition rates, many countries still face serious problems related to the progress of students through the system and of graduation rates. In some countries, the latter is as low as 25% for primary school and 18% for secondary. In this, the region has only been able to slightly improve past performance. The same is the case for effective learning, measured both in national and regional learning assessments and in the poor performance of countries in the region in international comparative studies.

Another problem related to efficiency is that financial resources that are targeted to benefit children who enter school in a timely fashion tend to be diluted before they reach the classroom. Additionally, students who fall behind and remain in the system beyond the age intended reduce the quantity of resources available for those students who progress normally according to their ages.

For education systems, grade repetition has a considerable cost. Among 15 countries in Latin America and the Caribbean, which account for more than 90% of the incidence of grade repetition in the region, the annual cost has been estimated to be nearly 11 billion dollars (Bruneforth, Motivans, and Zhang, 2003). Brazil is the country that pays most dearly—more than 8 billion dollars a year. The cost attributable to additional years caused by students who repeat grades is also high in Mexico and in Argentina.

Therefore, the challenge is to eliminate what has become a "culture of repetition", replacing it with a pedagogy of success within school systems. One must reduce the incidence of late age entry into the first grade, correct problems of over-age, and facilitate the flow of students through different grades. To this end, it is necessary to discuss new teaching strategies that are different from policies of automatic grade promotion, the effects of which mask the real situation of low performance within primary education.

An important dimension is that of the self-esteem of children in the first grade. It is important, therefore, to imbue them with confidence in their capacities to learn and to stimulate their natural desire to excel. It is also important to recognize and honor the tasks carried out by first grade teachers. To do so, it is necessary to improve their working conditions and to create incentives. Finally, it is necessary to encourage parents to participate in the transformation of schools into learning communities that are open to the requirements of communities and to changes in the labor market.

E. Closing the gaps

We have here argued for the need to move forward to improve access, permanence, and completion of education that is of high-quality, equal, and efficient. Attaining coverage and movement through grades does not necessarily guarantee quality, equity, and efficiency. But they are closely related. First, because greater achievement is related to greater equity, given that the key is to grant the entire population greater opportunities to progress through the educational system, reducing the inequalities that are a result of posterior employment trajectories due to the effect of differences in the valuation of human capital, expressed above all in years of formal education. The faster one can advance in achieving universal coverage of primary and secondary education, the greater the possibilities that in the future we will have societies with fewer poor and which are less segmented in terms of income, productivity, access to information, citizen capacity, and participation in communication and exchange.

In regard to quality, it is clear that achievement, measured in years of schooling, does not guarantee effective learning. It is possible that in terms of learning, four years of formal education in OECD countries is the equivalent to six years in less-developed countries. But still, there is a direct relation between more years of study and more learning. Clearly, progression in years is an achievement that should be accompanied by actions that lend more pertinence and effectiveness to what students learn in the classroom.

In terms of efficiency, and given that the concept is measured above all in inverse relation to levels of school drop-out and of grade repetition, expanding achievement is associated with reduction of the number of behind-grade students and of school drop-out. This equation is not automatic, for efficiency is also closely tied to the quality of education. An indicator of the latter is the capacity to assure that all students can learn what is required within a given time so that they may progress from one year to the next. It will also be necessary to invest resources in order to prevent school drop-out, above all among social sectors in which attending school is associated with opportunity costs that lead children and adolescents abandon school in order to work and provide income for their families.

In the following chapter, we discuss the gaps that countries in the region face in order to attain a set of goals in terms of coverage of the pre-school, primary, and secondary levels and of literacy training for adults. These serve as a minimum in order for education to be able to significantly increase its favorable impact in terms of human development, social equity, provision of human capital to the economy, and greater equality of access to the benefits of a modern society. These gaps in coverage are correlated with available and projected financial resources. They are also used to estimate future financial needs of countries in order to make continued progress toward education goals, having the year 2015 as a target year. Based on these additional financial requirements, we examine different options for generating new resources to aid in closing these gaps.

Chapter III, for its part, treats the problems and challenges of education system management. There, we present an assessment of lessons learned from reforms carried out during the last two decades in Latin America and the Caribbean, and brought together in the formulation of PRELAC, identifying key points where action is necessary so that increases in investments in education can produce positive results in terms of quality, equity, and efficiency. What is required, and what this document attempts to address with diagnoses and proposals, is to reconcile education access and continuity achievements with substantial advances in effective learning. In this sense, we wish to provoke broad-based discussion regarding new education paradigms and strategic actions in order to achieve greater quality, equity, and efficiency of education in the region.

II. Financing

A. Education goals and financial resources necessary for their attainment

1. Introduction

The commitments assumed by the governments of Latin America and the Caribbean in the Millennium Declaration, EFA, and the Summit of the Americas of 1998 establish a broad set of objectives and goals in the area of education. These goals involve not only important progress in guaranteeing to all the basic right to education, but also make it possible to expand opportunities for well-being, the cultural bases of citizenship, and the productive capacity of societies. Their fulfillment requires increasing the resources that countries devote to education and improving institutional capacity for designing, putting into practice, and assessing public activities in this field. For this reason—and this is the major corollary of the thoughts here presented—it is necessary to explore mechanisms that can complement available resources with alternative sources of financing, both domestic and foreign.

Within this framework, it is opportune to first examine the relation between predicted available resources and the cost of achieving the education goals proposed for the mid-term. In order to do so, we present estimates of current costs and of investments required for fulfillment of four education goals. The criteria for establishing these goals were the following: (i) that they be consistent among themselves; (ii) that they take into consideration the problems

of inequality of access and permanence (which are revealed in the great differences in enrolment rates between the children of different social and economic strata), inefficiency (which appears principally as high rates of grade repetition and school drop-out), and quality deficits that affect in greater or lesser measure all education systems of the countries in the region (and which are expressed by poor results in learning); and iii) that they explicitly consider the objectives stated in the declarations cited (Millennium Goals, EFA, PRELAC), the goals of which stipulate the year 2015 as a time frame for attainment. Methodological considerations regarding the estimates are detailed in Appendix 1.

The selected goals refer to achievements in the areas of pre-school, primary, secondary education, and in literacy training for adults. Basically, they seek to generate substantive progress that result in a continual improvement of progress in education of Latin American and Caribbean children and young people, as well as to provide a basic mechanism for social and economic integration for illiterate adults (such as giving them the ability to using reading and writing in their everyday lives). As mentioned above, such advances are essential for improving equity, human capital, and citizenship skills.

The goals considered are the following:

- Universal attendance in pre-school education, that is; to raise the net enrolment rate of children between 3 and 5 years of age to 100% in all countries of the region by 2015.
- Assure universal completion of primary schooling, considering that the goal of five years of primary education for all children between 6 and 12 years of age will be reached by increasing net enrolment rates to 100% while simultaneously reducing grade repetition rates to a very low level.
- Raise the coverage of secondary education to 75%, having as an established goal the achievement by 2015 of a net enrolment rate of not less than 75% of the population 13 to 18 years of age.
- *Eradicate adult illiteracy*; that is, to provide literacy training for all of the currently illiterate population 15 years of age and over and those who are in this situation until 2015. After that year, fulfillment of this goal will be assured to the extent that the second goal is met.

2. Goals, gaps, and missing resources

These goals are based upon the results analysis and diagnosis of the state of education in the countries of the region, which have emphasized the need to rapidly increase coverage for the pre-school and secondary levels, guarantee completion of the primary level, improve the efficiency of education systems (reducing grade repetition and school drop-out), improve quality and equity at all levels, and completely overcome adult illiteracy

These goals are more ambitious than those contained in the Millennium Declaration, which only explicitly contemplates assuring completion of primary education for all children. The goals coincide with those recognized in Education for All and in the Second Summit of the Americas (Santiago, April, 1998). The latter proposed as general objectives assuring that by the year 2010 one hundred percent of children conclude quality primary education, guarantee that at least 75% of young people have access to quality secondary education (with increasingly higher proportions completing this level), and working for continuing education. The two goals of total coverage for pre-school education and the elimination of adult illiteracy soon followed. The region has also assumed the commitment of eliminating gender inequalities in primary and secondary education, as established as well among the Millennium Goals.

As can be seen in Table 3, the additional resources necessary for fulfilling education goals by 2015 amount, according to this estimate, to 149 billion dollars.¹⁴ This figure represents nearly 7.5% of GDP for the year 2000 of the 22 countries in the region and 20% of the GDP of Brazil for the same year. If the group of countries considered wish to see the four goals fulfilled, they must spend within the next 11 years nearly 13.56 billion additional dollars per year (between 2005 and 2015). As a figure of reference, consider total public spending for education in the region in the year 2000 (81.9 billion dollars). Thus, the additional financial effort is 16.6% in comparison with what the countries of the region spent at the beginning of the decade.

It should be noted that the figures in Table 3, as well as those in Tables 4 to 7, referring to each goal specifically, do not distinguish between the situation of countries that could achieve these education goals using their own resources without altering the proportion of their GDP that represents public spending for education, from those which need to complement domestic resources with external sources of financing. The information presented in these tables refers, therefore, to the aggregate amount of public resources that each country requires in order to attain the goals by 2015. In point B of this chapter, in which different alternatives for mobilization of additional resources for moving toward achievement of the goals are analyzed, we present the situation of each one of the countries in regard to their possibilities of achieving the education goals with their own resources and the needs to complement them with external sources of financing.

We present below the situation for each of the goals.

¹⁴ As indicated later in point B, around 60 percent of these resources (US\$ 90 billion for the 2000-2015 period) would derive from the public budget if the percentage of GDP earmarked for pre-school, primary and secondary education by the 22 countries considered remained constant and an average annual economic growth rate of 2.6% achieved during the same period. This would require additional resources amounting to approximately US\$ 60 billion.

Table 3

**LATIN AMERICA (22 COUNTRIES): OVERALL ESTIMATE OF TOTAL AND ADDITIONAL COSTS INVOLVED
IN ORDER TO ACHIEVE THE FOUR EDUCATION GOALS BY 2015**
(In percentages of GDP and in millions of 1995 dollars)

Goal	Year 2000				Year 2005		Year 2010		Year 2015		Total additional resources required for attainment (US\$ mill.) b/	Total additional resources required for attainment without increasing quality d/
	Net enrolment rate	Cost per-capita a/	Total cost (US\$ mill.) b/	Total cost as % of 2000 GDP	Total annual cost as % of GDP c/	Additional resources needed in the year (US\$ mill.) b/	Total annual cost as % of GDP c/	Additional resources needed in the year (US\$ mill.) b/	Total annual cost as % of GDP c/	Additional resources needed in the year (US\$ mill.) b/		
Total goals	...	...	61121	3.06	2.95	6169	2.83	12381	2.71	18965	149931	125003
1. Universal coverage of pre-school education	51	483	5973	0.30	0.38	2641	0.44	5381	0.48	8195	64602	62441
2. Assure universal completion of primary education	93	445	27215	1.36	1.23	778	1.11	1581	1.01	2443	19082	12322
3. Raise coverage of secondary education to 75%	62	784	27933	1.40	1.35	2331	1.28	4934	1.22	7781	59314	43306
4. Eradicate adult illiteracy	11	160	...	...	..	420	..	485	..	547	6933	6933

Source: ECLAC, Estimates based upon "World Education Compendium, 2003. Comparison of World Education Statistics", Montreal 2003, UNESCO Institute of Statistics (UIS).

^a Costs per enrollee in public schools.

^b Additional cost in each year indicated in order to achieve coverage consistent with achievement of the goal in relation to what it would cost to maintain the year 2000 coverage rate. The figures are expressed in millions of 1995 U.S. dollars.

^c Historic growth hypothesis (average annual rate 1990-2002 of 2.6).

^d Reference here is to the adult illiteracy rate.

..: The figure is near to zero (0).

3. Universal pre-primary education

Arguments in favor of universal coverage of pre-school education (completing three years of education before entering primary school) are based on the importance of the experience of schooling at an early age (ECLAC, UNICEF, SECIB, "Construir equidad desde la infancia y la adolescencia", LC/G.2144, September, 2001).¹⁵ All evidence in this regard shows that children who have attended pre-school programs achieve better results in school than those who do not. Controlling for other factors that influence achievement, students with this background obtain better test scores and progress more rapidly during the school careers. This translates into lower grade repetition and school drop-out rates, particularly during the first years of primary school.

In this sense, progress toward universal coverage of pre-primary education increases the efficiency of education systems by reducing the number of years necessary to complete primary and secondary education, while contributing to closing the gap between children from different social strata precisely in the ages during which inequalities have the most negative impact on opportunities for future well-being. Progress toward attainment of this first goal is a condition toward achieving the others.

But there is another important consideration in favor of rapid progress toward achieving universal coverage of pre-school enrolment. Increasing these services provides greater opportunities for women to enter the labor market by allowing them to reconcile domestic tasks with paid employment outside the home, assuring the care of their children in school while they pursue gainful employment. During a time of rapid increases in the participation of women in the labor market, the possibility of their children having access to pre-primary programs is of importance both because of the future opportunities of the children and for women as well; especially for those who are members of low-income households where female contributions to family income is decisive in keeping them out of poverty (ECLAC, 2002-2003, Chapter III).

It should be remembered that pre-primary enrolment rates in the year 2000 were very low (around 50% as a regional average), with much lower levels in countries with low per capita incomes. In the latter, net enrolment rates varied between 15% and 30%. Only Cuba had achieved a rate close to the goal. These low levels of coverage in most countries—with a high proportion of privately-provided services—indicate the need for the public sector to make substantial efforts to reduce the gaps of access for different income strata of the population.

If one takes into consideration the low coverage of pre-primary education, it is not surprising that the resources necessary to achieve universal coverage at this level represent slightly more than 42% of the total resources required in order to achieve the four goals indicated; for this sector involves a figure of nearly 64 billion dollars (see table 4). On the other hand, as we shall see below, the relatively wide coverage of primary education in many countries requires a much smaller fraction of total resources.

¹⁵ Page 42 of the Follow-up Model of PRELAC also refers to the importance of universal coverage of early childhood education.

Table 4

LATIN AMERICA AND THE CARIBBEAN (22 COUNTRIES): COSTS FOR ACHIEVING UNIVERSAL COVERAGE OF PRE-SCHOOL EDUCATION BY THE YEAR 2015

Country	Year 2000						Year 2005		Year 2010		Year 2015		Total additional resources necessary to achieve the goal (US\$ millions.) ^d
	Net enrolment rate	Cost per capita ^b	Incidence of current costs on total cost	Total cost (US\$ mill.) ^c	Total cost as % of GDP 2000	Percentage of private enrolment	Total annual cost as % of GDP ^d	Additional resources necessary in the year (US\$ millions) ^c	Total annual cost as % of GDP ^d	Additional resources necessary in the year (US\$ millions) ^c	Total annual cost as % of GDP ^d	Additional resources necessary in the year (US\$ millions) ^c	
Argentina	60	1063	98	955.3	0.35	28	0.42	309.5	0.46	621.9	0.48	916.4	7413.2
Bolivia	36	112	86	20.1	0.25	30	0.49	23.2	0.72	52.6	0.94	87.5	634.8
Brazil	49	749	95	2524.3	0.34	28	0.45	1233.0	0.54	2511.2	0.59	3797.1	30080.2
Chile	41	1687	89	325.5	0.37	46	0.59	274.4	0.76	545.1	0.90	841.5	6614.4
Colombia	33	519	93	290.8	0.30	41	0.56	330.3	0.77	664.3	0.92	1004.8	7986.0
Costa Rica	59	269	100	34.6	0.23	16	0.28	10.4	0.31	21.3	0.33	32.5	255.4
Cuba	97	846	93	363.9	0.84	0	0.68	3.4	0.57	6.4	0.51	9.7	78.5
Ecuador	57	86	95	25.2	0.12	41	0.18	19.2	0.25	43.0	0.31	70.8	518.1
El Salvador	40	46	97	6.0	0.05	30	0.15	12.0	0.25	29.9	0.37	52.9	361.4
Guatemala	37	67	89	21.1	0.12	20	0.27	32.6	0.47	83.2	0.67	150.8	1010.7
Haiti	15	33	93	2.3	0.06	30	0.47	17.0	1.15	51.4	1.99	103.6	631.9
Honduras	21	152	93	12.9	0.28	30	0.71	23.9	1.04	48.5	1.28	73.4	581.6
Jamaica	82	159	94	16.3	0.32	22	0.29	1.3	0.27	2.7	0.25	3.9	31.8
Mexico	69	244	98	1014.1	0.21	10	0.21	163.6	0.21	316.6	0.20	464.5	3803.6
Nicaragua	27	159	93	14.1	0.35	30	0.75	19.4	1.06	39.9	1.28	60.4	476.7
Panama	46	257	97	16.7	0.18	22	0.23	8.1	0.26	15.9	0.29	23.6	191.4
Paraguay	60	125	92	26.4	0.31	22	0.40	11.1	0.51	25.3	0.59	42.2	305.5
Peru	61	129	88	123.7	0.20	15	0.23	40.5	0.26	83.8	0.28	131.6	1012.7
Dominican Republic	33	191	93	24.7	0.14	30	0.26	24.7	0.35	51.1	0.41	76.1	606.9
Trinidad & Tobago	52	1126	81	25.7	0.36	22	0.40	8.8	0.47	19.2	0.53	30.1	230.3
Uruguay	45	822	95	50.1	0.26	20	0.34	25.5	0.40	50.3	0.43	74.6	603.5
Venezuela	44	152	93	78.8	0.11	30	0.15	48.5	0.19	98.0	0.21	147.2	1173.7
Latin America and the Caribbean	51	483	95	5972.6	0.30	25	0.38	2640.6	0.44	5381.5	0.48	8195.0	64602.3

Source: ECLAC, based upon "World Education Compendium, 2003. Comparison of World Education Statistics", Montreal 2003, UNESCO Institute of Statistics (UIS).

^a Includes children from 3-5 years of age.

^b Cost per enrollee in public schools.

^c Additional cost for each year indicated in order to achieve coverage consistent with attainment of the goal in relation to the spending necessary to maintain rates at year 2000 levels. Values expressed in millions of 1995 US\$D.

^d Based on projections of past growth (annual average rate, 1990-2002 of 2.6%).

4. Assuring universal coverage of the primary cycle

Termination of a primary school cycle of no less than five years duration is a necessary condition for all people to be able to acquire knowledge and skills indispensable for active participation as citizens and is a requisite for continued progression through the education system. This crucial stage of training not only provides the minimum conditions for social integration — reading and writing— but provides opportunities for the acquisition of values, habits, and knowledge that give a sense of pertinence to society. These, among other considerations, explain why the Declaration of the Millennium considers universal termination of primary school to be the principal goal of education.

In spite of the fact that by the year 2000 coverage of enrolment in primary education in Latin America and the Caribbean had attained high levels (93% as a regional average),¹⁶ the percentage of children who had successfully completed primary school was relatively low. In effect, in 15 countries the average rate of continuation until the 5th grade by the end of 1990s was 83%, and in five countries this percentage was equal to or less than 80%. This clearly indicates that high rates of grade repetition, and especially of school drop-out before finishing the primary school cycle, continue to be serious problems in the region (ECLAC, 2001-2002, chap. III). To this is added the problems of quality, low teacher salaries, and lack of material and infrastructure —deficiencies which in their turn are also determinants of the unsatisfactory results obtained. All of this indicates that additional efforts and resources should concentrate on reducing school drop-out (both early drop-out and that which takes place at the end of the primary cycle), and especially on the grade repetition rate which besides raising per-student costs significantly, is one of the major causes of drop-out before the end of the cycle. This is one of the necessary conditions for attaining by 2015 the goal of the Millennium Declaration and of EFA which establish universal termination of the primary education.

In making this estimate, it was assumed that this objective can be attained by raising the net enrolment rate for 6 - 12 year olds to 100%, together with a decrease in the grade repetition rate until reaching 5% in the target year, using more effective pedagogical modalities than the mere automatic promotion adopted by some countries. With this, increasing necessary resources in order to raise enrolment rates as well as the quality of primary education, reducing the existing gap between public and private schools may be partially offset by cost savings resulting from greater efficiency; that is, from the fewer number of years necessary to complete the cycle. The most critical case is found in Brazil, a country that presents the highest grade repetition rate in the region (25% in the year 2000). Estimates of the resources needed to achieve the goal, assuming a gradual decrease in this rate to 5% in 2015, indicate that Brazil would not require additional resources to achieve the objective, since greater efficiency would compensate for the needs coming from increasing coverage. On the other hand, maintaining grade repetition at the current levels would demand of the country additional resources in the order of 200 million dollars per year between 2005 and 2015 (see table 5).¹⁷

Attaining the second goal (universal termination of primary education), reducing grade repetition rates and raising per-student spending in countries that are farther behind,¹⁸ would require only one-third of the resources demanded by fulfillment of the first goal of universal access to pre-primary education. The cost would be 21.5 billion dollars for achieving this goal. This represents only 14.4% of the total required for achievement of the four goals proposed for 2015. While for

¹⁶ Seven countries, among them Brazil, registered net enrolment rates of above 95%. Only Bolivia, El Salvador, Guatemala, Haiti, and Nicaragua had not attained coverage of at least 85%.

¹⁷ In a recent study, it is noted that the low efficiency of primary education in Brazil presents an annual cost of nearly 8 billion dollars. See Motivans, January, 2004.

¹⁸ See annex 1 of this document, which argues that there is a need for greater convergence between the different countries' per student costs.

achievement of the first goal, the additional resources would make up a growing portion of the GDP of all countries (except Cuba), for the second goal these resources represent, for most countries, an increasingly smaller percentage of GDP.¹⁹ As to be expected, the exceptions correspond in this case to countries that currently have low rates of primary school enrolment; i.e., Bolivia, El Salvador, Guatemala, Haiti, Honduras, and Nicaragua.

5. Raising the coverage of secondary education to 75%

For secondary education, both ECLAC and UNESCO have indicated the need for progress toward the goal of completion of this cycle. This necessity is based upon evidence that completion of secondary schooling currently is the level the completion of which grants to people a high probability to remain outside of absolute poverty for their entire active lives, given the benefits received from completion of the cycle and granting of the diploma (see ECLAC, March, 2004, chapter. V).

¹⁹ Figures expressed as a percentage of GDP were calculated based on a hypothesis of moderate, sustained growth, assuming an average annual growth rate of 2.6% for all countries, corresponding to the Latin American average for the 1990-2000 period. This average includes a period of relatively high growth in the region (1990-1997), and another of relative stagnation (1998-2002).

Table 5

LATIN AMERICA AND THE CARIBBEAN (22 COUNTRIES): COSTS FOR ACHIEVING UNIVERSAL COVERAGE OF PRIMARY EDUCATION^a AND ACHIEVING AT LEAST 5 PRIMARY GRADES BY THE YEAR 2015

Country	Year 2000							Year 2005		Year 2010		Year 2015		Total additional resources without increasing efficiency ^f (US\$ million)	Total additional resources necessary to achieve the goal (US\$ millions.) ^e
	Net enrolment rate	% grade repeaters	Cost per capita ^b	Incidence of current costs on total cost	Total cost (US\$ mill.) ^c	Total cost as % of GDP 2000	Percentage of private enrolment	Total annual cost as % of GDP ^d	Additional resources necessary in the year (US\$ millions) ^e	Total annual cost as % of GDP ^d	Additional resources necessary in the year (US\$ millions) ^e	Total annual cost as % of GDP ^d	Additional resources necessary in the year (US\$ millions) ^e		
Argentina	99	6	1172	98	4404.2	1.63	20	1.49	42.3	1.35	83.0	1.20	111.6	1031.3	971.2
Bolivia	84	4	165	86	187.5	2.37	9	2.59	29.0	2.70	61.7	2.74	97.4	741.3	741.3
Brazil	97	25	455	95	9339.9	1.27	8	1.08	-17.3	0.96	-7.4	0.85	7.6	2180.4	-115.0
Chile	89	2	1612	89	1609.1	1.83	45	1.71	110.9	1.54	193.4	1.43	293.7	2416.9	2416.9
Colombia	89	5	357	93	1647.6	1.70	19	1.66	103.3	1.53	190.2	1.41	279.2	2311.0	2311.0
Costa Rica	91	8	593	100	303.1	2.05	7	1.90	10.8	1.80	23.0	1.69	35.6	288.2	275.6
Cuba	97	1	1151	93	1304.8	3.02	0	2.37	11.9	1.91	21.6	1.61	30.7	260.9	260.9
Ecuador	99	2	95	95	142.9	0.67	23	0.79	43.6	0.85	87.3	0.89	129.7	1044.0	1044.0
El Salvador	81	8	48	97	34.3	0.31	13	0.60	38.4	0.86	84.7	1.06	134.3	1012.3	1010.8
Guatemala	84	14	113	89	182.1	1.02	13	1.31	62.8	1.58	142.8	1.80	237.7	1747.1	1721.8
Haiti	73	11	13	93	13.1	0.36	13	1.75	59.7	3.37	144.4	5.03	253.9	1756.5	1755.4
Honduras	88	14	119	93	111.5	2.41	13	2.84	28.8	3.11	61.2	3.30	96.4	749.1	734.7
Jamaica	95	5	284	94	98.6	1.90	5	1.65	1.6	1.42	3.0	1.25	4.6	37.0	37.0
Mexico	95	5	433	98	5746.3	1.21	8	1.09	114.5	0.96	212.7	0.84	298.9	2545.7	2545.7
Nicaragua	81	5	187	93	122.2	3.01	16	3.31	15.6	3.38	31.4	3.32	47.2	375.8	375.8
Panama	99	6	556	97	206.8	2.19	10	1.93	0.6	1.67	0.8	1.44	1.0	13.1	10.4
Paraguay	89	8	200	92	149.8	1.76	15	1.74	9.2	1.72	19.5	1.72	31.6	243.5	236.8
Peru	94	11	207	88	701.0	1.16	13	1.07	17.2	0.94	30.0	0.83	42.6	420.6	366.1
Dom. Republic	93	5	128	93	140.2	0.81	10	0.83	22.9	0.86	48.8	0.89	77.6	588.8	588.8
Trinidad and Tobago	92	6	1023	81	145.9	2.03	5	1.48	2.1	1.21	4.4	1.13	8.2	59.5	58.0
Uruguay	90	9	598	95	177.5	0.91	14	0.86	8.1	0.79	15.6	0.71	22.7	196.3	186.9
Venezuela	88	7	146	93	446.4	0.60	9	0.61	61.6	0.61	128.6	0.61	200.7	1559.3	1547.3
Latin America and the Caribbean	93	12	445	95	27214.7	1.36	12	1.23	777.6	1.11	1580.7	1.01	2442.6	21578.6	19081.6

Source: ECLAC, based upon "World Compendium of Education, 2003. Comparison of World Education Statistics", Montreal 2003, UNESCO Institute of Statistics (UIS).

^a Children 6 - 12 years of age.

^b Cost per enrollee in public schools.

^c Additional cost for each year indicated in order to attain coverage consistent with achievement of the goal in relation to spending required to maintain the coverage at year 2000 levels. Values expressed in 1995 US\$.D.

^d Based on projections of past growth (annual average rate, 1990-2002 of 2.6%)

^e Without reducing the percentage of grade repeaters.

Moreover, "secondary education in accordance with economic and social demands, of adequate quality that can be timely extended throughout most of a country is crucial for attaining higher levels of productivity, greater social efficiency, more opportunities for access to well-being, and greater possibilities for equity in access and in the full exercise of citizenship." (ECLAC, April, 1996). Almost a decade ago, ECLAC argued that for entry into the job market, extending secondary education is much more cost-effective than compensating for the lack of secondary education with adult training (ECLAC, 1995). If one chooses to strengthen compensatory adult education programs, this results in costs that vary from 1.5 to 5 times what it costs to provide four years of secondary education, thus illustrating the advantages of timely investment in secondary education (Labarca, 1996).

In spite of the progress achieved in the 1990s, the coverage of secondary education in the region continues to be very low. By the year 2000, and as a regional average, the net enrolment rate of the population 13 - 18 years of age was 62% . But not only is coverage of secondary education low; frequently, those who are so enrolled drop out before completing the cycle. The high drop-out rate in secondary education (in eight Latin American countries the figure exceeds 15%) results in significant social and personal losses. Consider that in the Latin American countries which have achieved relatively high secondary education enrolment rates (above 65%), permanence in school for two additional years until completing the cycle represents salary increases on the order of 30% during an individual's working life (ECLAC, 2001-2002, chapter III).

Considering the low secondary education enrolment rates in the region (9 of 22 countries recorded rates of less than 50%, and one-fourth of these were around 25%), it was felt that raising this coverage to 75% by the year 2015 was a reasonable goal, particularly when one considers that in this cycle the annual per-student cost is significantly higher than in previous levels.²⁰ In this case, however, efficiency increases (through reduction of grade repetition rates) were not included as in the case of primary education, although it was argued that the countries with lower levels of coverage should significantly increase resources per student, since however enrolment is increased (in terms of the public private mix) increases of supply at this level will require substantial government investment in order to meet the current spending needs, an particularly those of infrastructure.

Given this situation, the goal of increasing coverage of secondary education to 75% (a goal already met in Argentina, Chile, Cuba, and Jamaica) will also depend upon a high proportion of additional resources. Estimates indicate that an additional 59.3 billion US\$ will be required, representing 39.8% of the total necessary for meeting the four goals.

6. Eradicating illiteracy among young people and adults

Contrast between the rapid expansion that has taken place in enrolments at all levels of education (particularly during the 1990s) and the low levels in enrolments in many countries during the last 15 or 20 years explains why the region still presents relatively high levels of illiteracy among the population 15 years of age and over. This phenomenon not only affects the older population, but also a high proportion of young people and working age adults, many of whom, although having entered primary school, dropped out before completing the cycle, thus joining the ranks of functional illiterates. Eradicating illiteracy involves, therefore, serving those who have not had access to formal education as well as those who left school in order to seek employment or through disuse have lost the ability to read and to write. In order to offer adequate programs to these individuals is not only a duty of the State and a right of those whose lack of completion of the primary cycle results in serious social problems; it is also a key to providing them with the

²⁰ While the annual cost per enrollee in secondary education in the year 2000 was US\$ 784, the figures corresponding to the pre-school and primary levels were US\$ 445 and US\$ 483, respectively. The figures refer to the average cost in 22 countries of the region.

possibility of further training. The education reforms carried out in the region during the 1990s granted priority to the formal education of children; currently it is necessary to provide policies and resources to meet the education needs of young people and adults.

There are also purely economic reasons (in terms of private and social costs) that make broad-based programs of literacy training and adult education a highly profitable investment. Chief among these reasons are improvements in employment productivity, reduction of work-related injuries, decreases in infant mortality associated with lack of knowledge of (illiterate) mothers of basic notions of prevention (vaccination, hygiene, and food handling).

Available information indicates that in 10 of 22 countries the illiteracy rate is equal or above 10%, and in five countries it is above 20%. Currently, there are nearly 39 million illiterate adults in the region. To these may be added illiterates who each year enter this age group, although their numbers should tend to decline with progress in universal access to primary education. This contingent must be incorporated into programs that include a first phase of instruction in reading and writing skills and a second reinforcement phase using materials and content that are pertinent to the personal and employment conditions of participants. Such programs have an approximate duration of one year and a per capita cost for each of the phases of US\$ 80. The cost estimate to eradicate illiteracy in the region is based on a uniform figure of US\$ 160 per person per year without variations between countries.

The eradication of illiteracy in the region by 2015 will require an expenditure of US\$ 6.9 billion (4.6% of the total of additional resources) and involves serving 2.9 million people per year. Most of these resources (54%) would be spent by Brazil and by Mexico, countries that would annually serve 1.6 million people.

Table 6

LATIN AMERICA AND THE CARIBBEAN (22 COUNTRIES): COSTS FOR INCREASING ACCESS TO SECONDARY EDUCATION^a TO 75% BY 2015

Country	Year 2000					Year 2005		Year 2010		Year 2015		Total additional resources to achieve the goal (US\$ million) ^c
	Net enrolment rate	Cost per capita ^b	Incidence of current costs on total cost	Total cost (US\$ million) ^c	Total cost as % of year 2000 GDP	Total annual cost as % of GDP ^d	Additional resources necessary in the year (US\$ million) ^c	Total annual cost as % of GDP ^d	Additional resources necessary in the year (US\$ million) ^c	Total annual cost as % of GDP ^d	Additional resources necessary in the year (US\$ million) ^c	
Argentina	79	1791	98	4478.6	1.66	1.51	27.6	1.36	53.3	1.23	76.8	627.6
Bolivia	68	147	86	97.7	1.23	2.25	93.0	3.30	215.1	4.16	353.5	2574.1
Brazil	71	745	95	10125.3	1.37	1.18	162.8	1.01	308.9	0.91	496.7	3849.0
Chile	75	1963	89	1287.3	1.46	1.49	91.4	1.32	96.7	1.13	74.7	1207.2
Colombia	57	656	93	1524.0	1.58	1.68	232.2	1.78	493.5	1.72	718.6	5779.5
Costa Rica	49	807	100	182.5	1.23	1.38	37.7	1.40	74.2	1.45	114.9	902.0
Cuba	82	1774	93	1393.0	3.22	3.02	0.0	2.35	0.0	1.88	0.0	0.0
Ecuador	48	243	95	145.3	0.68	1.02	97.5	1.38	225.7	1.71	376.9	2715.0
El Salvador	26	1062	97	190.3	1.73	2.77	146.3	3.76	316.9	4.45	493.1	3779.2
Guatemala	26	272	89	99.2	0.56	1.21	133.9	2.07	350.3	3.04	656.0	4288.5
Haiti	26	87	93	24.5	0.67	2.67	84.5	5.03	211.7	8.45	424.8	2676.5
Honduras	26	298	93	60.7	1.31	2.72	74.9	4.39	187.2	5.99	327.6	2254.0
Jamaica	74	491	94	112.7	2.17	1.90	0.5	1.66	0.9	1.41	1.1	10.4
Mexico	60	912	98	6195.2	1.30	1.29	591.8	1.25	1197.7	1.17	1761.0	14239.0
Nicaragua	36	299	93	66.5	1.64	2.66	52.1	4.14	135.5	5.52	241.1	1631.9
Panama	62	1015	97	189.0	2.00	1.99	16.3	1.89	31.9	1.75	46.3	380.4
Paraguay	47	404	92	121.2	1.42	1.84	45.7	2.23	102.5	2.58	170.5	1238.6
Peru	65	290	88	531.2	0.88	1.09	182.5	1.26	395.5	1.34	607.6	4691.1
Dom. Republic	40	659	93	262.7	1.53	1.78	85.3	1.91	166.5	2.05	254.3	2020.8
Trinidad & Tobago	71	829	81	93.0	1.29	1.01	1.0	0.72	1.2	0.56	1.5	15.7
Uruguay	70	1111	95	205.8	1.06	1.01	7.6	0.95	15.1	0.87	21.7	178.1
Venezuela	50	396	93	547.6	0.74	0.89	166.3	0.99	353.4	1.07	562.1	4255.8
Latin America and the Caribbean	62	784	95	27933.3	1.40	1.35	2330.8	1.28	4933.6	1.22	7780.8	59314.3

Source: ECLAC, based upon "World Compendium of Education, 2003. Comparison of World Education Statistics", Montreal 2003, UNESCO Institute of Statistics (UIS).

^a Includes young people from 13 - 18 years of age.

^b Cost per enrollee in public schools.

^c Additional cost for each year indicated in order to attain coverage consistent with achievement of the goal in relation to spending required to maintain the coverage at year 2000 levels. Values expressed in 1995 US\$.D.

^d Based on projections of past growth (annual average rate, 1990-2002 of 2.6%).

Table 7

LATIN AMERICA AND THE CARIBBEAN (22 COUNTRIES): COSTS TO ERRADICATE ADULT ILLITERACY^a BY 2015

Country	Year 2000		Year 2005	Year 2010	Year 2015	Total resources to achieve the goal (US\$ mill.) ^b	Annual average number of recipients of program benefits (Miles)
	Adult illiteracy rate	Illiterates 15 years and over (thousands)	Resources necessary (US\$ mill.) ^b	Resources necessary (US\$ mill.) ^b	Resources necessary (US\$ mill.) ^b		
Argentina	3	845.6	9.3	10.1	10.8	146.7	61.2
Bolivia	15	732.4	7.3	9.1	11.2	128.7	53.7
Brazil	13	15892.9	168.5	191.2	209.9	2742.1	1144.3
Chile	4	460.1	4.8	5.4	6.0	78.0	32.5
Colombia	8	2377.6	24.7	29.2	33.8	416.4	173.7
Costa Rica	4	120.6	1.2	1.5	1.8	21.3	8.9
Cuba	3	292.8	3.0	3.3	3.4	47.5	19.8
Ecuador	8	705.1	7.2	8.7	10.2	123.3	51.5
El Salvador	21	859.0	9.6	11.0	12.4	157.1	65.5
Guatemala	31	2016.9	23.4	27.8	33.2	396.1	165.2
Haiti	50	2506.7	30.5	34.0	37.2	487.4	203.5
Honduras	25	944.6	10.4	12.9	15.6	181.5	75.7
Jamaica	13	231.0	2.6	2.8	3.0	40.7	16.9
Mexico	9	5836.6	60.9	71.2	80.8	1015.4	423.6
Nicaragua	34	973.6	12.0	13.9	16.1	198.6	82.8
Panama	8	159.1	1.7	2.0	2.2	27.8	11.6
Paraguay	7	223.3	2.3	2.9	3.6	40.9	17.1
Peru	10	1719.6	17.7	21.0	24.4	299.6	124.9
Dom. Republic	16	911.5	10.1	11.6	12.8	165.3	69.0
Trinidad & Tobago	2	16.6	0.2	0.2	0.2	2.7	1.1
Uruguay	2	61.0	0.7	0.7	0.7	10.3	4.3
Venezuela	7	1186.9	11.8	14.6	17.3	205.5	85.8
Latin America and the Caribbean	11	39073.3	419.9	485.1	546.7	6933.0	2892.8

Source:: ECLAC, using on-line data base of UNESCO Institute of Statistics. (UIS). (http://www.uis.unesco.org/ev.php?URL_ID=5275&URL_DO=DO_TOPIC&URL_SECTION=201)

^a Considers persons 15 years of age and older, and a fixed cost of US\$160, for literacy training and post-literacy training programs.

^b 1995 US\$D.

B. Mobilization of additional resources to close gaps between countries and to move toward fulfilment of education goals

Most of the resources supplied to education systems of countries of the region come from specifically targeted government budgets. However, in recent years there has been an increase in the support of the private sector, above all through expenditures by families in order to improve the education of their children - a trend that indicates increasing appreciation on the part of parents of the importance of educational achievement for social and intergenerational mobility. At the same time, public spending depends on tax revenue, transfers that governments provide for different sectors and services, on economic growth, and on capturing extra-budgetary funds, both domestic and foreign. Increases in private expenditures depend of increases of resources available to families and upon how families view education expenditures in the allocation of household budgets. To government and family expenditures we may add other complementary sources such as the business sector, international bilateral and multilateral cooperation, support from philanthropic sources, religious groups, and non-governmental organizations.

One must also consider the overwhelming weight of current spending in the composition of total public spending, as well as in much of private spending. Current spending tends to account for 90% of total public expenditures in education, and is directly principally at paying the salaries of teachers and of administrators, with a smaller amount going toward maintenance and infrastructure costs. One of the advantages of diversifying financing is to achieve more flexibility in spending in order to invest in the priorities set by governments in order to move toward achieving their own objectives. In other words, "fresh" resources make it possible to finance programs aimed, for example, at improving continuity within education systems, above all for the most vulnerable and disadvantaged sectors of the population, and to improve management of education systems so that current spending has a greater impact on the equity, quality, and efficiency of these systems.

In the following pages, we will treat possible sources of financing that would make it possible to increase or to improve investments in education, offering options for diversifying such sources in order to make progress toward the goals introduced in the preceding chapter. Before proceeding, we will utilize the results of cost estimates presented above in order to highlight the different situations of countries in the region and the possibilities available to them for using public resources for financing attainment of the four education goals here proposed.

1. Ability of countries to self-finance progress toward the education goals

In face of the need to finance the proposed education goals, the countries of the region present different situations in regard to their capacity to assume the costs and to use public resources to meet the education goals by the year 2015. Such capacity depends, naturally, on current degrees of coverage and achievements at each level of education, on the performance of the GDP, and on the percentage of GDP that is used for public spending on education.

Table 8 illustrates the enormous differences that exist in this regard in the region. While some countries are able to finance education goals using budgetary resources, others, who are in the majority, will be unlikely to do so without resorting to other sources of financing which allow them to complement public funds, whether domestic —for example, greater private participation in supplying resources— or external, as with the various alternatives for seeking resources through development programs.

Thus, it is possible to distinguish a first group of countries —among which are included two of the most populous nations in the region (Argentina, Brazil, Cuba, Jamaica, Mexico, Panama,

Trinidad and Tobago, and Uruguay) which, given the hypothesis of moderate economic growth of GDP until the target year (2.6% annually),²¹ would not require extra-budgetary resources to set upon the path of achievement of the goals in the coming years and to achieve them by 2015. These are precisely the countries of the region which currently dedicate a relatively high percentage of their GDPs to public spending for education, and especially to the pre-school, primary, and secondary levels. The exception is Uruguay, where the macroeconomic priority of public spending on education is relatively low (2.8% of GDP), but which presents high levels of coverage of these levels and, therefore, requires a relatively small addition of resources in order to move toward fulfillment of the goals.

In these eight countries, public spending for education should expand at a rate lower than 2.0% annually (lower than the projected GDP annual growth rate of 2.6%).²² Under these circumstances, the challenge lies in assuring as a minimum a growth in public spending for education on the order of 1.0% annually, and in counting on a counter-cycle budgetary policy in order to sustain such expansion in the face of possible contractions of GDP.

Chile and Costa Rica, although not directing percentages of GDP to expenditures on education higher than the regional average (4.2% and 4.4%) present situations somewhat different from the aforementioned countries. Although both countries can attain the goals established for 2015, they will thus record a slight deficit of budgetary resources until 2010 of approximately 5% and 2% respectively of the total resources that they currently spend. Both countries should make greater efforts than the countries of the above group by increasing public resources to approximately 2.6% —slightly above the rates of expansion of their GDPs.

²¹ This rate corresponds to the annual average rate of growth for the region during the 1990-2002 period, which contained a cycle of relatively high growth (3.5% annually between 1990 and 1997) and a cycle of low growth (of 1.2% annually between 1997 and 2002).

²² It should be noted that in the 1990-2000 period, public expenditures on education expanded at an average rate of 7.7% in the region. In practically none of our countries was the rate lower than 5%.

Table 8

LATIN AMERICA AND THE CARIBBEAN (22 COUNTRIES): TOTAL RESOURCES NECESSARY IN ORDER TO REACH THE FOUR EDUCATION GOALS BY 2015 AND BUDGETARY DEFICIT RESULTING FROM MAINTAINING THE MACROECONOMIC PRIORITY OF PUBLIC SPENDING ON EDUCATION^a

Country	Total public spending for education as % of GDP	Costs for pre-school, primary, & secondary education b/, year 2000		Year 2005			Year 2010			Year 2015		
		as% of 2000 GDP	(US\$ mill.) a/	Total annual cost as % of GDP ^a	Additional resources necessary (US\$ mill.) ^c	Budget deficit (US\$ mill.)	Total annual cost as % of GDP ^a	Additional necessary resources (US\$ mill.) ^c	Budget deficit (US\$ mill.)	Total annual cost as % of GDP ^a	Additional necessary resources (US\$ mill.) ^c	Budget deficit (US\$ mill.)
Argentina	4.6	3.65	9838.1	3.41	388.6	...	3.17	768.2	...	2.92	1115.5	...
Bolivia	5.5	3.85	305.2	5.34	152.5	-201.6	6.72	338.5	-432.2	7.84	549.7	-677.9
Brazil	3.8	2.98	21989.5	2.71	1547.0	...	2.50	3003.9	...	2.35	4511.3	...
Chile	4.2	3.66	3221.9	3.79	481.5	-157.7	3.62	840.6	...	3.45	1216.0	...
Colombia	5.1	3.58	3462.4	3.91	690.5	-543.6	4.07	1377.2	-909.5	4.05	2036.4	-999.1
Costa Rica	4.4	3.51	520.2	3.55	60.2	-10.3	3.51	120.1	-1.0	3.46	184.7	...
Cuba	8.5	7.08	3061.7	6.07	18.3	...	4.83	31.3	...	4.00	43.8	...
Ecuador	1.6	1.47	313.4	1.99	167.5	-144.2	2.49	364.7	-311.3	2.90	587.6	-494.0
El Salvador	2.3	2.09	230.6	3.52	206.3	-206.4	4.87	442.4	-445.6	5.88	692.7	-685.2
Guatemala	1.7	1.70	302.4	2.80	252.7	-244.6	4.11	604.0	-581.2	5.52	1077.6	-1027.9
Haiti	1.1	1.09	39.8	4.90	191.8	-189.0	9.55	441.5	-434.1	15.48	819.5	-810.3
Honduras	4.0	4.00	185.1	6.27	138.0	-129.7	8.55	309.8	-284.3	10.57	512.9	-460.7
Jamaica	6.3	4.39	227.6	3.84	5.9	...	3.36	9.4	...	2.91	12.6	...
Mexico	4.4	2.72	12955.6	2.60	930.8	...	2.42	1798.2	...	2.21	2605.2	...
Nicaragua	5.0	5.00	202.8	6.72	99.0	-91.3	8.57	220.7	-200.6	10.12	364.8	-320.1
Panama	5.9	4.37	412.5	4.15	26.7	...	3.82	50.6	...	3.48	73.0	...
Paraguay	5.0	3.49	297.4	3.99	68.3	-73.6	4.46	150.3	-158.0	4.89	247.8	-256.6
Peru	3.3	2.24	1356.0	2.39	258.1	-175.6	2.46	530.2	-280.1	2.45	806.2	-313.7

Source: ECLAC, based upon "World Education Compendium, 2003. Comparison of World Education Statistics", Montreal, 2003, UNESCO Institute of Statistics (UIS).

^a Given a hypothesis of historic growth rates (average annual rate, 1990-2002 of 2.6%).

^b Does not include adult education programs.

^c Additional cost for each year indicated in order to attain coverage consistent with achievement of the goal in relation to the spending required to maintain the coverage rate of the year 2000. The figures are expressed in millions of 1995 US\$. b/1995 US\$.

However, most of the countries of the region (12 of the 22 studied) will not present conditions for financing the goals using public resources alone, unless they make an effort to raise education budgets to very high levels. The resource deficit would be most serious precisely in those countries that are most behind in education and which at the same time have the lowest levels of per capita GDP in the region. Such is the case for Bolivia, Ecuador, El Salvador, Guatemala, Haiti, Honduras, and Nicaragua. All of them need to expand public budgetary expenditures on education to rates approaching 8% annually in order to achieve the established education objectives. But these rates are even higher than those for total public expenditures on education during the 1990s—a period of notable expansion of expenditures in this sector. Furthermore, three of the seven countries mentioned had by the year 2000 already dedicated a high proportion of GDP to spending on education (Bolivia 5.5%, Honduras 4.0%, and Nicaragua 5.0%). In this sense, both these countries as well as Ecuador, El Salvador, Guatemala, and Haiti (which dedicated a very low proportion of their GDPs, 1.6%, 2.3%, 1.7%, and 1.1% respectively), would require to add a significant volume of complementary resources to their own efforts in order to move toward fulfillment of the goals by 2015.

The situations in Colombia, Paraguay, Peru, the Dominican Republic, and Venezuela are different—countries that will need to carry out relatively slight increases in their education budgets. In effect, all of them would need to expand such spending by a rate of less than 5% per year—which in any case is very much lower than that which they achieved during the 1990s. Three of these five countries dedicate to education a fraction of GDP that is less than the regional average of 4.1% (Peru 3.3%, the Dominican Republic 2.5%, and Venezuela 3.0%).

In summary, the annual volume of additional public resources required of countries with the lowest levels of education in the region amounts to US\$ 2.6 billion in 2005 (see the table below). This is the deficit that 14 of the 22 countries studied need to cover. The importance of these resources within the total public budgets of these countries, as well as in terms of their expenditures for education, varies considerably, including among those with lowest per capita income in the region. In effect, Bolivia, El Salvador, Guatemala, Haiti, Honduras, and Nicaragua, which are—except for Bolivia—the countries with the lowest coverage of the three levels of education involved in the proposed goals (see table 9) would require approximately US\$ 1.06 billion in 2005 in order to cover the greater costs related to moving toward attainment of the four goals by 2015. In regard to GDP, these resources represent between 2% and 2.5% of the GDP of Bolivia, Honduras, and Nicaragua. In El Salvador and Guatemala they represent between 1.2% and 1.7% of GDP, while in Haiti this figure rises to nearly 5% of GDP. These resources, expressed as a percentage of total public spending on education, vary between 40% and 70% in these countries, except for the case of Haiti, where the deficit would quadruple the volume spent by that country on education.

It is evident, therefore, that at least in these countries there is a need for considerable additions to public budgets. Such countries do not possess the conditions for financing the proposed goals using their own resources without negative impacts on other priorities, such as those in health or in funds dedicated to programs to counter hunger and extreme poverty.

2. National public resources

Countries of the region have made considerable efforts to consistently increase public spending on education, both in absolute terms and as percentages of their GDPs and on social programs in general. It is important that this trend continues in the mid-term, avoiding cyclic reductions of public resources in order to assure continuity of both national and local education programs. Furthermore, it is essential to achieve greater efficiency in use of available resources, making them more effective and to thus free badly-spent resources so they may be have intended impacts.

(a) Efficiency and efficacy: new mechanisms used in reforms²³

The efficiency and efficacy of public expenditures have been the subjects of much discussion and innovation in the reforms carried out by countries in the region during the last two decades. There are no single recipes for improving the allocation and use of resources, but there do exist a series of options that have been put to the test.

One option is to link use to demand or to supply using the criterion of "funds following children", which takes advantage of market mechanisms in order to finance schools in proportion to the number of students they are able to attract and maintain, stimulating competition within the system in order to optimize efficiency.²⁴

Another option is the allocation of awards based upon standardized assessments that measure school performance based upon student learning achievement of basic language and mathematics skills and that stimulate school personnel to strengthen effective student learning.

Expenditures may also be allocated by education level, given that higher education involves per-student costs that are up to eight times more than those for primary education and which is made up largely of students who come from families with the ability to make financial contributions to the education of their children.

In order for education expenditures to have a greater redistributive impact, for more than a decade resources have been allocated to targeted programs that serve low achievement populations living in areas with very limited resources. Targeting makes it possible for part of investments that are not earmarked for current expenditures to be managed using equity criteria. In general, these kinds of programs seem to be particularly applicable for improving access to the pre-school and primary levels. A problem that often occurs is that often, targeted programs are limited in time, and once support is removed, whether technical or financial, there is no guarantee that improvements will be sustained in the long-term. For this reason, it is necessary that such programs be long-range or be directed at programs that assure structural improvements in schools.

Recently, programs have been created that provide direct financial subsidies to low-income families who have school-age children in order to prevent the withdrawal of children from school due to school attendance opportunity costs or due to additional expenditures related to transportation and acquisition of school materials. These direct monetary subsidies tend to involve considerable resources, since they are directed at large groups of the population. But at the same time, they make possible considerable savings in the efficiency of systems due to their positive impact on school retention and the progression of beneficiaries through the school system.

Another mechanism utilized to optimize the impact of financing is that of creating small-scale, low-cost projects for which schools may compete as beneficiaries and which are offered by ministries of education. Such mechanisms present various advantages: they can be included in the management and execution of special support projects of the actors themselves (school principals and teachers), making these individuals responsible for the impact of the resources so allocated. Thus, participants may develop school management skills. They establish competitive mechanisms for receiving funds that stimulate the ability to design and manage viable projects on the micro level. Resources may be allocated using criteria of equity and directed at areas in need. They also make it possible to make best use of the small part of public education budgets that are not earmarked for current expenditures. The problems that tend to occur in these programs are due to the lack of continuity of such projects and inequalities in technical capacity between schools to design projects and to compete for funds under equal conditions, which can result in increasing pre-

²³ This point is further elaborated, from the perspective of management and within the context of lessons learned from education reforms, in the following chapter.

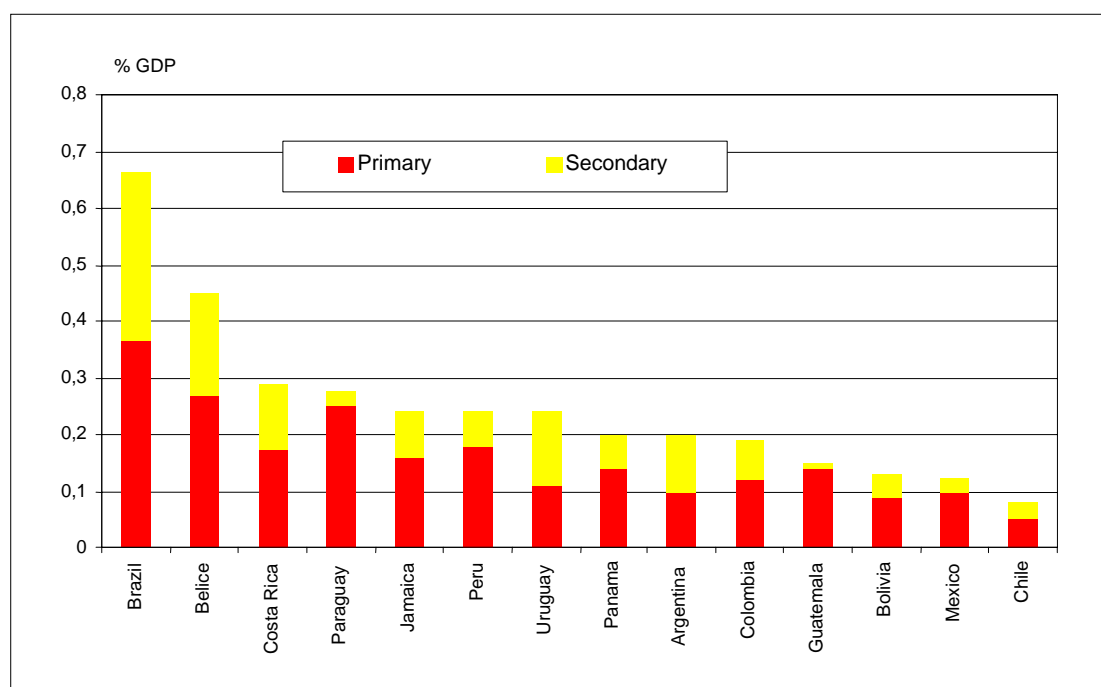
²⁴ This policy should address both market defects and other undesired effects such as discrimination against poorer children and those who live in isolated areas and are the most difficult to educate. Therefore, the regulatory role of the State is important.

existing differences. It is thus necessary to complement the funds with support for schools in helping them to design projects.

(b) Resources resulting from improved internal efficiency of systems

Measuring the efficiency of education systems is no easy task. One can arrive at an approximation of the efficiency of education systems by studying indicators of internal efficiency such as the rate of timely departure of students from the system, the expected time of departure, and grade repetition rates. The latter is presented in figure 7, from which it is evident that the costs related to this factor differ from one country to the other, but that in all systems it represents a significant portion of GDP, approaching from almost 0.7% of GDP in Brazil to 0.1% in Chile. Countries such as Ecuador, Guyana, Bolivia, and Jamaica report grade repetition rates of 5% for the first grade, while in Uruguay, El Salvador, Paraguay, Costa Rica, and Guatemala grade repetition rates for the first grade of primary school are equal to or more than 15%.²⁵

Figure 7
COSTS RELATED TO REPEATING STUDENTS



Source: UNESCO Institute for Statistics.

The increase of public budgets for education takes place under circumstances in which the efficiency of expenditure use has problems that are made evident by high rates of grade repetition, over-age students in grade, and school drop-out. With some 27% of students being over-age for their grade levels, it is estimated that the region wastes some 12 billion dollars annually.

Reducing internal inefficiencies of education systems is particularly urgent in the current situation of scarce resources. It is essential that countries with high rates of over-age students and grade repetition effectively identify the causes of these losses of resources and develop cost-effective policies that increase the efficiency of education systems in the region. In most countries,

²⁵ Nevertheless, this information should be viewed with caution, since factors such as automatic grade promotion and different data collection and processing models may affect the comparability of the figures.

it is good business to invest in universal timely access and to improve the rates of progression and retention within the systems, considering the savings to be gained by reducing system inefficiencies.

Other areas where one may increase the efficiency of resources invested is in improving student attendance rates and in diminishing the frequent interruptions to which classrooms are subject. Being able to teach the same skills and abilities in less time than planned results in cost savings and a consequent liberation of resources. The on-going review of educational processes is essential for increasing efficiency by this means.

In order to prevent school drop-out, whether seasonal or definitive, recent experience shows alternatives that have proven their efficacy, above all those based on financial transfers to low-income families in order to mitigate the opportunity costs involved in having children in school rather than being involved in out of school activities that supplement family incomes. Policies aimed at increasing the coverage of education often conflict with the decisions of families themselves to not send their children to school. In some cases, this happens because education is not valued. In others, it is due to the lack of educational services. Often, children are kept out of school because the lack of materials is so serious that economic hardships involved in sending a child to school are difficult to overcome. For the great majority of middle-class and upper-class families, this problem does not exist because the potential earnings of an out of school child represents a small proportion of actual family income. The same is not the case for poorer families, for whom potential earnings of young people are an important element in total family income.

This factor should be taken into account by any comprehensive education policy that aims at reducing inefficiencies resulting from school drop-out. The most appropriate policy in this case, already mentioned above, is the design of subsidies that at least partially replace the earnings of children and young people who are very poor and who wish to persevere in their education. This not only compensates families for the opportunity cost involved for families who maintain their younger members within the education system. It also creates a concrete incentive for those who argue for the permanence of these students within the system. Such subsidies should be provided beginning at the educational level in which drop-out begins, and ideally should increase as an individual progresses through the system. The value involved should be sufficiently attractive to avoid drop-out, which in its turn depends of a series of elements (effective labor opportunities, potentials, etc.) that vary by country.

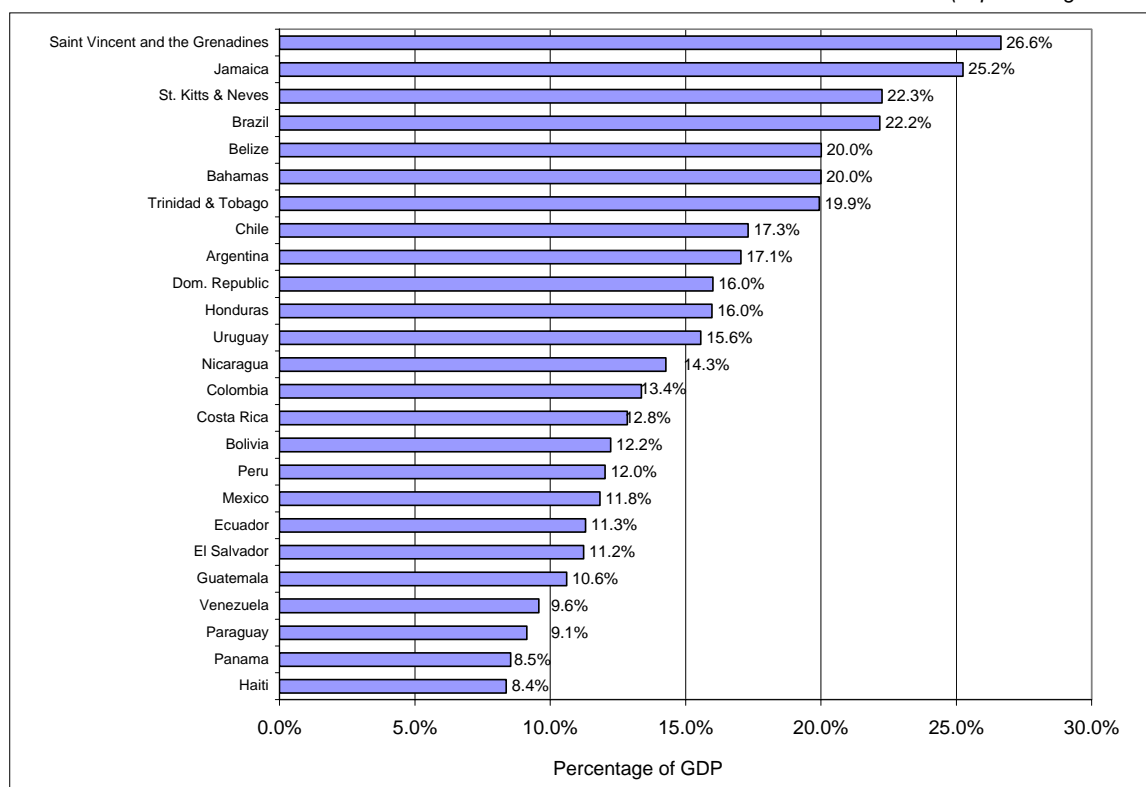
Among recent experiences, two social policy "star programs" in Latin America show valuable outcomes in this direction. One of these is the "Opportunities Program" in Mexico, in which monetary transfers to very poor families are conditioned upon the school attendance of their children. This has not only reduced school drop-out, but has also been responsible for more timely progression of many children through the school cycle, reducing grade repetition. In the case of Brazil, its "School Grant Program" contributed significantly during the 1990s to reducing the highest grade repetition rates in the region.

(c) Tax policy, targeted taxes, and tax incentives

Given that the tax burden in Latin America and the Caribbean is comparatively light, there is room within tax systems for collecting additional resources that could be used to support attainment of the education goals that have been proposed.²⁶

²⁶ Figure 8 excludes from the comparative analysis social security contributions, due to the great variety of such systems in the region. It should be noted, moreover, that such payments are influenced by demographic factors. In shared systems, if the population is older, contributions by younger people will be greater than in a country with a younger population. Since such factors are not corrected, comparisons would not be useful.

Figure 8
TAX BURDEN IN LATIN AMERICA (EXCLUDES SOCIAL SECURITY CONTRIBUTIONS)
(In percentage of GDP)



Source: ECLAC, based on official data, and FMI for data from the Bahamas.

^a Refers to the central government, except for Argentina and Brazil, which refer to governments in general.

^b Tax burden data for Belize and Trinidad & Tobago are for 2001, while those for the Bahamas are from 1995.

In industrialized countries, tax burdens vary between 20% and 35% (both figures without considering social security contributions). Average tax collections for Latin America and the Caribbean are lower, with various countries having collection rates of less than 15%. This restricts the possibilities of establishing a solid social policy that, among other aspects, touches upon the enormous challenges that the region faces in education. For this reason, a revision of current tax systems is essential in many countries of the region. It is important that tax systems be consolidated and that they establish reasonable tax burdens that, without significantly effecting the decisions of economic actors, achieve collections of above 15%. The highest collection rates, established at above 20%, require more extensive discussion that takes into account the advantages and disadvantages of rates above this level.

On the other hand, given that national efforts to improve education have achieved consensus among a broad spectrum of the population, including the business sector, it is possible to think about the allocation of special taxes the collection of which would be directed specifically to programs aimed at improving educational achievement among the population. This is not easy, for when it comes time to set social priorities there are many claimants, all with convincing arguments. However, special efforts in education are particularly justified because its potential impacts are so diverse (with positive impacts on equity, human capital, child and adolescent health, access to networks, greater integration in cultural processes, communication, and others).

There are precedents for using property taxes in order to finance education expenditures, and examples of taxes specifically directed at the provision of textbooks. In general, specific taxes that have been applied to benefit education have been used for professional training and come from companies or directly from industry payroll deductions.

Taxes selected should be those that, first of all, minimize distortions generated on economic activity and, secondly, have a redistributive impact. In general terms, it is advisable to establish broad-based policy agreements that permit additional collections, as a percentage of GDP, to be directed preferentially toward education, at least during the time period required to close gaps and to achieve the education goals to which governments have committed their efforts. Given that a more educated society benefits all in a lasting manner, and that its impact makes it possible to achieve progress in equity, strengthening both democracy and productivity, social agreements in favor of education can be fostered for specific support in this sense. To do so, it is necessary to mobilize the communication media, churches, NGOs, and political parties, among others, in order to achieve these kinds of agreements.

Another way to provide additional support for education is through tax incentives. Given that the donations of companies and of individuals are cost-sensitive, the most practical manner that States have available to affect prices of donations is through the tax system using incentives. If a donation to education can be deducted as an expense by individuals or by companies in order to reduce taxable income, the donation then takes on a different cost for the donor. The price of a donation can be reduced even more through different tax incentives such as, for example, those that allow for directly deducting the value of donations from taxes paid.

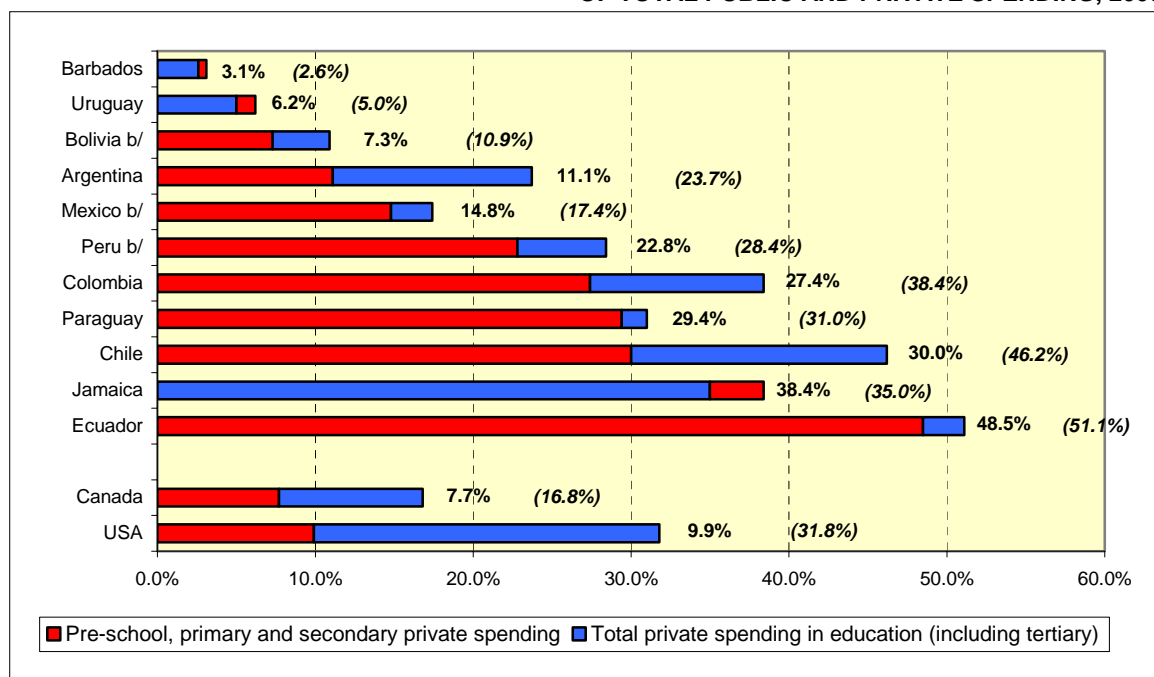
3. National private resources

Private financing of education has grown everywhere, although in OECD countries this represents only 12% of expenditures for education. On the global scale, it is estimated that governments provide 63% of all financing of education. The private sector contributes 35%, and international assistance 2% (UNESCO Education Sector Bulletin, No. 5, April-June, 2003). In Latin America and the Caribbean the support of private expenditures for education as a percentage of GDP varies greatly between countries (see figure 9). Since the year 2000, while in Jamaica this percentage reaches 3.3 and in Chile 3.2, in Uruguay it only accounts for 0.1 and in Mexico 0.2 (1999). While the regional average of public spending on education as a percentage of GDP is slightly less than the average for the OECD countries, private spending, as a percentage of GDP exceeds in many countries that of the majority of OECD countries.²⁷

²⁷ See Michael Bruneforth, Albert Motivans, and Yanhong Zhang, "Investing in the Future: Financing the Expansion of Educational Opportunity in Latin America and the Caribbean", UNESCO INSTITUTE FOR STATISTICS, Montreal, 2004.

Figure 9

LATIN AMERICA AND THE CARIBBEAN (11 COUNTRIES) AND NORTH AMERICA (2 COUNTRIES): PRIVATE SPENDING FOR SCHOOLING AS A PERCENTAGE OF TOTAL PUBLIC AND PRIVATE SPENDING, 2000



Source: UNESCO Institute for Statistics (UIS), 2003; UIS/OECD/IMF (data: annex table A2).

^a Included in brackets are figures relating to total private spending at all levels including tertiary education.

^b Data for 1999.

There is room for expansion of private support. As ECLAC and UNESCO noted more than a decade ago, "there are a number of forms that private contributions can take: programs partially financed by companies, above all at the local level, in order to support selected schools; (...) utilization of exemptions and tax incentives favoring private individuals who make donations to education; (...) contributions to specific funds for improving the quality of education, etc." (ECLAC-UNESCO, 1992, p. 188).

(a) Families

Families support the financing of education with spending associated with school assistance (books, transportation, uniforms, etc.), opportunity costs of children and young people who do not provide family income due to their dedication to study, the payment of tuition, and in rural communities through the voluntary provision of inputs (school construction, supply school lunches, etc).²⁸

Although domestic private spending has increased during the last decade, above all through family expenditures and by the private sector in the supply of education, there are justifiable doubts regarding the distributive impact of such an increase. If this spending is proportional to family incomes, and if its elasticity is a function of resources and savings at the disposal of families, one may suppose that this increase in private spending concentrates more resources in upper income

²⁸ Experiences of financing of local rural communities consist of financing operational costs and maintenance of schools with goods produced in the schools themselves and with the support of inputs from the community. There are experiences of this kind in Cuba, the Dominican Republic, Honduras, Panama, and Trinidad & Tobago, applied to formal education as well as extra-school activities. (See Calcagno, 1997).

groups where education achievement and years of schooling and effective learning are better than in the rest of society.

Given that family support is constituted in large part by private spending for education, one must consider its impact on equity; that is, on the equality of opportunities of access and trajectory, within the education system, for children of different social and economic groups, ethnic background, and territorial location. If increases in family support have a direct impact on the quality of education that their children receive, the risk is clear that the gap in educational achievement by social strata tends to increase rather than decrease.

There are options for channeling family spending in alternative ways that allow for more progressive allocation in the distribution of such resources. In this regard, mechanisms or incentives for private savings for education can be established, creating channels for attracting family savings for education just as is done for other sectors (health and social security) in which State regulation can act to produce positive effects in terms of equity through compensatory systems of transfers.

A problem that should be considered is the limit imposed by the availability of family resources, above all because in the last two decades, household contributions to education expenditures increased significantly at middle and lower social and economic levels, reducing its future elasticity. In order to sustain this expansion, countries should increase their levels of economic growth with greater social equity, which would permit a greater number of families to have resources available to increase their monetary support to the education of their children.

(b) The business sector and CSR

The private economy is the greatest beneficiary of strengthened secondary education because such education makes available people who are better qualified to adapt to technological and organizational change. This is the key to establishing alliances with this sector. Co-financing can result from a mixed system, combining resources directed to training that some countries establish, with those who can provide professional training and even to improve the link between secondary education and job training. In this sense, the private economy should contribute both with information and assistance in adjusting secondary education curricula to market changes and labor practices.

Involving business people or companies in the activities of schools is essential at the moment of fund raising, carrying out improvement projects, supporting the implementation of curricular changes, and strengthening the vocational aspects of teaching.

The region provides few examples of companies joining with ministries of education in the provision of school infrastructure or technology. This kind of joint venture can be very useful because it makes possible economies of scale, and availability of materials and technology already existing in the country. A very successful example of this kind is the support of the major telephone company of Chile in providing computer equipment and internet connections to schools in Chile. Another very recent case is the signing of an agreement between UNESCO and Microsoft for that company to provide technological support to the development of education in the region. In general, the area of school information and communication equipment can receive vigorous support from telecommunication, computer software, and telecommunication companies. Similarly, publishing companies can provide donations of textbooks to schools with low-income students and in return receive tax write-offs or technical support in text content from ministries of education.

As ECLAC and UNESCO have suggested, agreements can also be created between schools and the private sector, with incentives to carry them out, such as the provision of matching funds that complement resources generated by the schools. In order to assure that these kinds of support do not have a regressive distributive impact, the State can play a compensatory role, complementing the resources generated by each school in a value inversely proportional to the social and economic level of the respective community (ECLAC-UNESCO, Education and knowledge...op.cit.).

A theme with increasing presence both in business and political culture, and which provides opportunities to link business and education is that of "corporate social responsibility" (CSR) in which different groups take part —stock holders, investors, workers, unions, consumers, NGOs, and other actors from civil society. Increasingly, companies are expected to concern themselves with citizenship, with the needs of society, and to support community well-being and sustainable development. Economic rationality is involved here as well. Companies realize that in return for their support for communities they receive recognition, thus improving their public image.

Within the framework of CSR, a growing number of companies today invest in activities involving skill-building and contribute to solve social and economic problems that have been identified and defined by communities themselves. Many companies create alliances with non-profit organizations, governmental agencies, service providers, and other companies in order to satisfy a variety of community and commercial needs. In addition, multinational companies are re-defining the meaning of "community", going beyond local confines to include other geographic areas in which their interests are located and where they have major operations. Besides the usual financial balance sheet, we now increasingly encounter *corporate social balance sheets or reports* which companies issue annually, listing the projects, benefits, and social activities directed at employees, investors, stock holders, market analysts, and communities. These documents are strategic instruments for assessing, disseminating, and duplicating the exercise of social corporate responsibility, creating closer links between companies, society, and the environment. In the cases of France and the United Kingdom, it is a legal obligation to accompany financial reports with social reports that relate activities concerned with CSR.

It is opportune to bring the corporate world into education. Little has yet been done in the region in this regard, and the potential is great indeed. An important reason is that the business sector itself understands how it can benefit in the mid-term in terms of better trained human resources. This not only applies to the specific activities of technical-professional education linked to the specific activity of the company, but also has to do with the development of general skills that lead to a greater capacity for human resources to adapt themselves to changes in technology, work routines, and production.²⁹

Association of the concept of CSR with closing gaps and achieving education goals represents an opportunity to provide more resources in meeting these objectives. This is not an easy task because often, CSR corresponds to carefully developed strategic plans. The willingness of companies to make education, and specifically the attainment of education goals, a focal point of CSR, will crucially depend on the will of countries to close the gaps and to achieve these goals within the agreed-upon time periods. In this, governments focused on the fulfillment of the education goals, besides the fiscal efforts that they must make, can do much to encourage the commitment of other social actors.

4. External resources

(a) Foreign debt and education

Among the possible sources of external financing, there has been a growing trend to defend the possibility of converting, through various financial mechanisms, part of the servicing of public debt into investment in education. More than a decade ago, ECLAC and UNESCO stated jointly

²⁹ An excellent example in the region is the program "Business Leaders for Primary Education and Education Reform" developed in the Dominican Republic. This program was founded by Acción para la Educación Básica -EDUCA-, the objective of which is to improve coverage and quality at this level of education through the implementation of reforms and the participation of all sectors of society. To this end, the program sought to incorporate the financial participation of 200 business people and professionals, considering four areas: printed information in order to build community awareness regarding the importance of education; support for solving conflicts between teachers and government in order to support the reform; targeting low-income schools; and encouraging the participation of parents, communities, and companies in school activities. Assessments of this program have shown that it achieved the incorporation of the business community and other sectors of civil society in the improvement of education.

that a possible source of financing in order to give a new impulse to education was "re-allocation of funds between different sectors; for example, from defense and debt service toward education and knowledge" (ECLAC-UNESCO, 1992).

Recently, some governments of the region have proposed in international forums the idea of reconverting part of the servicing of foreign public debt into investments in education that could have a high impact in terms of achievement, efficiency, and equity. This proposal was officially formulated by the Ministry of Education of Argentina, Daniel Filmus, in his speech at the III Conference of Ministers of Education (Paris, October, 2003), requesting UNESCO to assume leadership in this subject. This idea was to include in a clause in the negotiation of this debt the swapping of part of debt servicing for expanding the coverage of primary education. The precedent here is the debt/nature swapping in order to protect the environment. On the same occasion, the initiative received the support of the Ministers of Education of Brazil and of Venezuela. Moreover, the President of Peru introduced a similar idea before the Director General of UNESCO. Similarly, a IDB document produced for the Summit of the Americas of Monterrey stated that "in the case of Latin American and Caribbean countries, 3% of the debt would be sufficient to guarantee education grants to 22 million children who are outside school, who attend irregularly, or who have abandoned their studies." (IBD, 2003).

At the fourteenth Ibero-American Summit of Heads of State and Government held in San José, Costa Rica, in November 2004, leaders agreed on two fundamental action lines as part of the debt for education swap. The first referred to the negotiation of the bilateral and multilateral debt of Ibero-American States, and the second to the discussion with IMF on classification criteria for social investment. In this context, the community of Ibero-American countries would propose to IMF new criteria for counting education spending as social investment. In this respect, certain developing countries have opposed the IMF criterion of counting social and infrastructure investment as expenditure, as this raises the fiscal deficit and hampers governments' implementation of their poverty-eradication plans.

Undoubtedly, this kind of proposal involves enormous complexities for its generalized application in the region. First of all, it could have a negative impact on the availability and flow of future external financing that is so necessary to aiding the development of countries of the region. Therefore, any negotiation would have to guard against such consequences. Second, the countries that are the farthest behind in regard to the education goals in question and which require greater additional resources in order to move forward, are those that have the lowest foreign debts. Finally, the instruments that allow for debt swapping assume the willingness of different actors in the public debt bond market, which is not easy to achieve.

For these reasons in the considerations that follow we do not adopt a policy position in regard to this proposal, but rather attempt to portray the variables at work and the context of the debate in order to contribute to a regional, technically-oriented discussion in regard to the proposal.

Resource needs and their comparison with interest payment on the public debt

Since the year 2000, interest payments on central government debt have represented an average of 2.6% of GDP in 18 Latin American countries, with very significant differences between them. For example, in Chile, El Salvador, Guatemala, Honduras, Paraguay, and the Dominican Republic such interest payments represented less than 2% of GDP, while in Colombia, Ecuador, and Panama they were over 4% of GDP.

Table 9 shows that, in general, the countries with the lowest education development in the region are those that pay the lowest fraction of GDP for interest on the debt of the central government. The exception is Chile, that spends the smallest proportion of GDP (0.4%) for payment of this interest, and is located among the countries with the highest education achievement. One may conclude from this that in the countries with the lowest income per capita, forgiveness of

interest payments on public debt would not be sufficient for financing the additional resources the need in order to achieve the goals. These resources could contribute to financing additional public expenditures in the education sector —and in some cases in a significant manner, as would be the cases in Nicaragua and Paraguay— but they represent only a fraction of the financing required in the other low income per capita countries. This is the case for Bolivia, El Salvador, Guatemala, Haiti, Honduras, and the Dominican Republic.

It should be noted that even with debt service conversion, these countries would not be able to finance attainment of the education goals from public funds. Other sources of financing must be found in order to complement those that would be made available from conversion of the service payments on their foreign debts.

Table 9

LATIN AMERICA AND THE CARIBBEAN (22 COUNTRIES): PUBLIC EXPENDITURES FOR EDUCATION AND PUBLIC DEBT SERVICING, 2000

Country	GDP per capita (1995 US\$D)	Combined enrolment rates in pre-school, primary, & secondary schools ^a	Total public spending for education as % of GDP	Public spending for pre- school, primary, and secondary ed. as % of GDP	Annual interest payments on public debt ^b	
					% of GDP	(US\$ mill.) ^c
Argentina	7283	79	4.6	3.65	3.4	9124.3
Bolivia	941	63	5.5	3.85	1.9	147.3
Brazil	4324	72	3.8	2.98	3.9	28839.7
Chile	5790	68	4.2	3.66	0.4	368.0
Colombia	2285	60	5.1	3.58	3.9	3765.0
Costa Rica	3775	66	4.4	3.51	3.7	551.4
Cuba	3861	92	8.5	7.08	...	...
Ecuador	1682	68	1.6	1.47	5.9	1255.2
El Salvador	1756	49	2.3	2.09	1.3	141.6
Guatemala	1562	49	1.7	1.70	1.3	232.9
Haiti	436	38	1.1	1.09	0.5	18.8
Honduras	714	45	4.0	4.00	2.0	91.4
Jamaica	2009	84	6.3	4.39	...	...
Mexico	4811	75	4.4	2.72	3.0	14306.3
Nicaragua	800	48	5.0	5.00	3.3	134.7
Panama	3205	69	5.9	4.37	4.2	400.7
Paraguay	1552	65	5.0	3.49	1.1	95.1
Peru	2333	73	3.3	2.24	2.1	1285.8
Dom. Republic	2052	55	2.5	2.48	0.7	117.0
Trinidad and Tobago	5584	72	4.0	3.68	...	...
Uruguay	5826	68	2.8	2.23	2.1	403.6
Venezuela	3082	61	3.0	1.44	2.6	1965.4
Latin America and the Caribbean ^d	3938	69	4.1	3.06	3.2	63244.3

Source: ECLAC, based upon "World Education Compendium, 2003. Comparison of World Education Statistics", Montreal, 2003, UNESCO Institute of Statistics (UIS).

^a Average net school enrolment rates at their respective levels.

^b Average annual expenditures for interest on public debt, 1999-2001

^c Figures are expressed in millions of 1995 US\$D.

^d Corresponds to country weighted averages.

In 2001, the public, or publicly-guaranteed debt of the governments of Latin America and the Caribbean represented 58% of the foreign debt of the region and amounted to the equivalent to US\$ 765 billion. As can be seen in Table 10, the greatest proportional debt burden is held by Nicaragua and, to a lesser extent, Ecuador, Honduras, and Panama.

Table 10
PUBLIC DEBT TRENDS

(As a percentage of GDP on December 31 of each year)

	1991	1996	2001
Argentina	NA	35.7	53.7
Bolivia	43.7	40.3	41.2
Brazil	12.9	15.9	33.2
Chile	38.3	14.7	14.7
Colombia	15.0	14.9	43.3
Costa Rica	25.7	31.3	37.4
Ecuador	67.2	65.6	67.8
El Salvador	NA	56.0	35.6
Guatemala	19.9	13.8	17.9
Haiti	NA	45.2	52.3
Honduras	81.0	82.2	57.7
Mexico	37.4	30.1	23.2
Nicaragua	610.0	341.8	349.3
Panama	60.8	79.9	82.2
Paraguay	8.2	9.7	27.1
Peru	60.9	45.1	46.7
Uruguay	NA	NA	36.8

Source: ECLAC, ILPES, Data base. figures correspond to the debts of central governments and, therefore, do not include the debts of decentralized institutions or of central banks. In general, the figures are for gross debt, with the exception of Brazil and of Colombia which report net debt. See the original source for specific notes.

Among the countries analyzed, only Ecuador has interest payment expenditures that greatly exceed education expenditures, a situation that is not surprising, given the low central government expenditures and very low tax collections. The country has long maintained a high foreign debt and modest growth in GDP, which in the 1990s reached an average of only 1.9%. The opportunities to finance social expenditures under these circumstances have been rare. Ecuador must make extensive efforts in order to achieve the education goals set by governments of the region. Panama is the other country with high interest payments, a product of high levels of indebtedness that have increased through time. This country will also have to make a significant effort in education.

Other countries with high debt servicing payments, above 3% of GDP, are Brazil (4%), Colombia (3.9%), Costa Rica (3.7%), Argentina (3.5%), Nicaragua (3.3%), and Mexico (3.1%). (4%), Colombia (3.9%), Costa Rica (3.7%) y Argentina (3.5%), Nicaragua (3.3%) y Mexico (3.1%). In recent years, Brazil, Costa Rica, Colombia, and Argentina have increased their indebtedness significantly as a percentage of GDP. This is an indication that the macroeconomic situation at the end of the 1990s made it impossible to maintain previous levels of public indebtedness as a percentage of GDP. The case of Nicaragua is special in the sense that it has carried a very high debt burden for an extended time. But it is a country that is being considered in the debt reduction initiative called HIPC (Highly Indebted Poor Countries). Mexico, on the other hand, pays relatively high amounts of interest—which is not surprising when considering that it has

been able to reduce its debt level as a percentage of GDP by almost 15% during the last decade and has significantly raised its exports as a percentage of GDP.

Seen from the perspective of the comparison between debt service and increasing education expenditures in order to meet the 2015 goals, the picture is different. If we consider countries whose annual debt service payments exceed 3% of GDP, the relation is variable. Based on estimates for the year 2000, while Argentina would occupy an annual equivalent near 9% of the annual payment of interest on its public debt, Brazil would require to use something more than 15%, Colombia around 40%, Ecuador a proportion near 30%, Nicaragua around 180-190%, and Panama between 7 and 8% (See Table 8). In general, the relation between debt servicing and additional resources required to make possible education goals is extremely variable.

The proportion of public vs. private creditors also varies between countries. For example, in Argentina, 38% of debt is domestic and in the hands of private investors or semi-private bodies such as pension funds. In Brazil, Colombia, and Mexico, the proportion of the public debt that is domestic reaches 61%, 50%, and 60%, respectively. In Ecuador and Peru, in contrast, the proportion of the public debt in foreign hands reaches 77%. The situation, then differs between countries. Furthermore, although data in this respect are questionable, the proportion of the debt that is in the hands of multi-national organizations or of governmental agencies varies between countries.

Regarding the proposal to remit or convert public debt service payments into investments in education

In proposing debt for education swaps two very different arguments are used; one ethical and the other, practical. The ethical argument is that education has been globally recognized as an inalienable social right of all children and young people, because it is the means of access to other inalienable rights (to work, dignity, a just income, etc.). From this ethical perspective, the interests involved in debt servicing and contracted at rates that are disproportional in regard to those that currently prevail in the financial system, result in many countries sacrificing basic social rights (such as universal access to quality education) in order to duly meet their financial commitments. Moreover, evidence from the last decade shows that the majority of countries in Latin America and the Caribbean simultaneously carried out fiscal and commercial efforts to service their debts and efforts to continue to increase their expenditures for education, even under adverse economic contexts with a negative financial flows. This should make it clear that the region has a strong commitment to education. This fact should add strength to negotiations for debt forgiveness or for conversion of debt service payments into investments in the sector given that, just as fiscal restrictions appear to be a *sine qua non* condition for continuing to service the debt, alternative sources are needed in order to continue the progressive trend in public investment in education.

The practical argument is that, for financial viability in the long run, high return social investment for human resource training is essential. Eventually, this will make it possible to take major steps in the added value of national economies. The better trained the peoples of the region are for aid the competitiveness of the economy, greater will be the possibilities for positive trade balances and economic growth in the medium and long term. This, in turn, will result in better conditions to be able to meet financial commitments. The high rate of return on additional years of education also makes this investment extremely profitable. To the extent that agreements are reached on conversion of part of the debt to high-return investments in education, (such as progressing in the proposed goals), such return should be translated into better domestic conditions to carry out debt servicing.³⁰

³⁰ Human resource development is an essential condition for sustained growth, which in turn is the best guarantee for fulfillment of financial commitments in the long term.

To date, there have been few experiences of debt servicing for education swaps and the sums involved have been low. Regardless of the amounts involved, the funds can be used for targeted investments with very positive impacts, especially considering waning international cooperation for education in the region and the limited effect on countries' total education investment. In any event, debt for education swaps are but one additional contribution rather than the main financing solution for the sector as a whole.

Among existing initiatives that involve a mechanism of debt forgiveness in exchange for social investments or environmental preservation measures, the most well-known is the HIPC initiative that began to operate in 1996 as an effort of the World Bank and the International Monetary Fund in order to reduce the foreign debt of the poorest and indebted countries in the world. The initiative is only open to countries that qualify for aid of the International Development Agency of the World Bank and for the Poverty Reduction and Growth Support Plans of the IMF. Countries have also been able to participate which have debt situations that are unsustainable through time. In the region, countries which have been part of this initiative are Bolivia, Honduras, and Nicaragua. The major objective of the project is to eliminate unsustainable debt of beneficiary countries in a reasonable time so they may arrive at a sustainable debt burden and escape the permanent cycle of debt renegotiation.³¹ The resources freed are used in poverty reduction programs, and the countries that are part of this initiative commit themselves to achieve and to maintain macro-economic stability and fiscal sustainability and to initiate reforms that assure good government, that stimulate growth, and that make it possible to reduce poverty.

Converting debt to investments in education is a possible, but limited path that needs to be rethought. The discount rate of some of types of Latin American debt instruments should be the basis of any additional effort in this regard. The challenge is how to transfer these resources to education. The first path is indirect, and involves the establishment of a purchasing authority of debt instruments of the country in question that can be accompanied by the sale of companies or other assets, if the decision is to not emit foreign debt³². There are two savings that can be produced by this means that could be incorporated in an education fund in each country that uses this mechanism. The first source of savings is the difference between the nominal value of the debt and the value at which one purchases the instrument from investor who originally acquired it on the secondary market. This value could probably not be immediately incorporated into the fund, given the budgetary restrictions that governments who purchase the instruments face in the short term. A second savings is that which is derived from the difference in rates that could be obtained between the old foreign debt and the new domestic debt. The interest that one obtains currently should be less than that in previous years if one considers the current state of low interest rates throughout the world. The savings flow resulting from this difference could be incorporated immediately into the education fund (EF).

In case one opts for the sale of assets in exchange for debt, taking into account the low, and even negative returns that many of these assets provide, the EF could be complemented with the tax flows that privately managed assets could provide. In this case, however, given that it would not be necessary to emit foreign debt instruments in order to re-purchase foreign debt acquired on the secondary market, the savings on interest payments could be fully added to the EF. It is important that this fund have an institutional design that can withstand the pressures of groups interested in making use of such resources. Ideally, asset allocation should be defined in such a way as to strengthen the policies that best contribute to the attainment of the education goals proposed by the region.

³¹ For more details, see IMF and the World Bank, 2003.

³² In countries with little development of financial markets, the possibility of issuing internal debt instruments that replace foreign debt may be a real possibility.

A more direct manner of providing support for education could occur with a good institutional design of the fund. If this is achieved, the way would be open for various other organizations to make contributions similar to what has occurred in support for preservation of the environment. The most successful examples are those which have purchased debt to be exchanged in a particular country for an already-established ecological preserve in the receiving country. In order to make such donations more effective, governments of the region could establish tax incentives for companies that repurchase debt on international markets and deposit the resources obtained in local currency in the EF. This operation could be permitted for the purchase of both public and private debt. Multi-national countries that operate in the region could have sufficient incentives to become involved in these activities, given that this would support their corporate image—which is today an important element for business competitiveness. Moreover, tax incentives, when properly established, could be an attraction for national companies. Efficiently and transparently managed funds could have an important impact on broadening the coverage and quality of education.

Precedents for the bilateral conversion of foreign debt that involve official bilateral creditors have existed since the middle of the 1980s. These operations transform one asset into another with different payment characteristics. Such operations tend to be called "swaps" (debt/private investment swap, debt/development swap, and debt/nature swap).³³ In Latin America, there are experiences of bilateral agreements for debt reduction within the framework of debt/development swaps that "involve a creditor government that converts its debt, almost always with a discount, with the commitment on the part of the debtor country that it will use the equivalent—or a smaller fraction—in local currency in a development project previously agreed upon with the creditor country".³⁴ An alternative to this mechanism is to incorporate an international NGO that acquires the debt with a discount using its own resources, and vending the same to the debtor country on the condition that the proceeds in local currency will be employed in a development project. Another alternative is that an NGO of the debtor country be a receptor of the transfer and executor of the project.

Among the expected positive effects of these programs are that they convert debt service and not capital (avoiding possible inflationary impacts); that transfers are conditioned upon programs agreed upon by creditors and debtors; that efficient management is guaranteed through the creation of trust funds in order to better manage the funds made available by debt conversion (with such trust funds bringing together representatives of the creditor and debtor governments, NGOs, and others); and that they provide greater impulse in the use of bilateral debt.³⁵

Various bilateral debt reduction agreements have been carried out in Latin America. In Peru, of note is the new program for conversion of the foreign debt of Peru with Spain in projects for reconstruction of the areas effected by the earthquake of June, 2001; the Peru-France Counter value Fund to strengthen agricultural productive capacity, foster productivity in rural areas, place street children in school, develop health centers and rural training centers, and to foster basic nutritional education; and the Peru-Switzerland Countervailing Fund that has transferred 34 million dollars in projects that have benefited nearly three million inhabitants in mountainous rural areas in the development of natural resources, social infrastructure, and small businesses.

In Ecuador, a fund called FOES was established in 1995 in order to manage nearly 10 million dollars for debt reduction, the product of bilateral agreement with Switzerland. Spain agreed to forgive US\$ 4.68 million of debt owed by Costa Rica, with the proceeds going to environmental projects and managed by the Costa Rican Environmental Fund. The long experience of Costa Rica in this field also allowed the country to reduce its debt with the United States by US\$

³³ Based on MECyT of Argentina, September, 2003.

³⁴ Ibid., p.11.

³⁵ See Ibid..

54 million in order to increase forest areas, and US\$ 12 million of its debt with France for environmental projects. With the initiative of the UNDP, El Salvador is in the process of a debt conversion program with Spain and Germany, while in the Dominican Republic, a debt conversion program has been implemented with Spain in order to develop infrastructure. Bolivia has established debt conversion agreements with Spain and with Germany aimed at public investments, irrigation, and social investment. Argentina established a Fund for the Americas that administrates US\$ 3 million of debt service forgiveness with the United States and directed at sustainable development.

Any initiative in this field requires having clear criteria in regard to where to invest, with what objective, and how to assess the results and explain these criteria in eventual re-negotiation processes. For the latter, one must be clear regarding where to direct additional resources in terms of the impact. On the other hand, distributive criteria should also be considered, benefiting as receptors of debt forgiveness or conversion programs those countries that require greater resources in relation to their levels of GDP, in order to achieve the goals proposed.

It remains to be seen what institutional structure will be adequate for managing debt service conversion resources. An option suggested by the government of Brazil is to follow the AIDS prevention program model, with an international deliberative council (with representatives of government of some countries, international organizations, and representatives of civil society) to which projects would be submitted. Within countries, it will be necessary to institutionalize a linking mechanism between public authorities in the areas of education, finance, and foreign relations, maintaining substantive responsibility with education authorities.

(b) International cooperation

Member countries of the Organization for Economic Cooperation and Development (OECD) are an important source of bilateral cooperation (country to country flows of funds) for education throughout the world. The Development Assistance Committee of the OECD maintains information on the contributions of member countries and on multilateral assistance provided by the European Community. The Committee's data base indicates that the total volumes of this source fluctuated on the global scale, between US\$ 300 million and US\$ 450 million per year during the 1997-2001 period. Of this total, bi-lateral support of member countries made up more than 80%. The seven major donors, in absolute terms are France, Germany, Japan, Holland, the UK, and the United States. These countries' contributions account for more than three-fourths of total bilateral cooperation for education. The European Community also is one of the major donors in education cooperation. The greatest percentages of aid to education are from New Zealand (33.3% of its total aid), France (24%), the United States (3.3%), and the European Community (3.9%).³⁶

In regard to multi-lateral cooperation, monetary support for the development of education systems in the region comes, among others, from such international cooperation organizations such as the World Bank, the Inter-American Development Bank (IDB), the International Aid Agency of Japan, and the United States Agency for International Development (AID).

The databases of the Development Assistance Committee (DAC) of the Organisation for Economic Co-operation and Development (OCDE), the World Bank (IBRD) and the Inter-American Development Bank (IDB) have been used produce fairly accurate estimates of total flows. The following table shows that total international cooperation for education in Latin America and the Caribbean grew to over US\$ 2 billion in 1994 (peak year after Jomtiem) and that a significant proportion of total international cooperation has been targeted at basic education.³⁷

³⁶ Según datos del DAC.

³⁷ McMeekin, R., 2004.

Table 11

**INTERNATIONAL COOPERATION CONTRIBUTION TO EDUCATION
IN LATIN AMERICA AND THE CARIBBEAN**

OECD Development Assistance Committee a/					World Bank b/		Inter-American Development Bank c/		International cooperation		
Year	Total	Bilateral	Multila- teral d/	For basic education	Total	For basic education	Total	For basic education	ALL SOURCES Total	Basic	Basic as % of total
1990	315.5	189.7	125.8	66.0	60.6	36.3	16.2	0.0	392.3	102.3	26%
1991	221.0	176.2	44.8	24.0	534.2	223.8	60.8	57.2	816.0	305.0	37%
1992	197.1	196.9	0.2	17.5	405.9	300.9	110.1	37.6	713.1	356.0	50%
1993	162.5	105.0	57.5	24.9	479.7	212.2	207.3	49.1	849.5	286.2	34%
1994	268.6	122.3	146.3	21.5	918.9	746.2	948.6	406.3	2136.1	1174.0	55%
1995	194.5	106.2	88.3	61.1	1058.2	293.0	123.8	52.0	1376.5	406.1	30%
1996	183.3	158.1	25.2	60.5	474.0	113.9	268.7	40.0	926.0	214.4	23%
1997	300.7	300.6	0.1	74.5	76.3	22.9	473.3	67.1	850.3	164.5	19%
1998	336.7	233.0	103.7	69.0	957.8	249.9	309.5	297.2	1604.0	616.1	38%
1999	433.0	343.2	89.8	180.3	461.8	172.2	316.3	263.8	1211.1	616.3	51%
2000	355.0	336.3	18.7	118.3	62.8	34.6	244.3	81.6	662.1	234.5	35%
2001	370.5	264.4	105.9	124.7	529.1	115.4	687.7	90.9	1587.3	331.0	21%
2002	560.4	N.D.	N.D.	209.7	560.4	211.5	118.8	85.9	1239.6	507.1	41%

a/ Source: Development Co-operation Directorate, Development Assistance Committee (DAC) of OECD, with the assistance of the statistics department.

b/ Source: World Bank, Human Resources Development Division, with the assistance of the World Bank statistics department.

c/ Source: Human Resources Department, Inter-American Development Bank .

d/ Source: The European Development Fund (EDF) is the multilateral organization for international cooperation from the European Community and is included in DAC statistics.

Although these sums are considerable in absolute terms, they represent only a small part of the total expenditures for education in the beneficiary countries, taking into account public and private spending in these countries. In one of the poorest countries, the volume reaches 6% of the total spend for education, but for the region as a whole, this represents between 2% and 3% of total expenditures for education. However, given that national spending is dedicated primarily to the payment of salaries and other current expenditures, such cooperation represents almost the only source of funds for innovations and for activities dedicated to improving education.

The probability of increasing bi-lateral and multi-lateral international cooperation contributions in the medium term is low because on the world scale, the region has less importance as an object of such cooperation. It is seen as a relatively developed region, in spite of the great heterogeneity in education levels of the population and the fact that it is the most unequal region in the world.

On a world scale, multi-lateral cooperation is the modality that offers the greatest possibilities for overcoming the education gaps and challenges in the region. It is carried out principally by the large banks that operate in the region, e.g., the World Bank and the Inter-American Development Bank (IDB). Between 1990 and 2002, the amount of support from both banks for investments in education in the region varied between US\$ 300 million and US\$ 1.8 billion per year and the resource flow from both banks has varied considerably from year to year.

The World Bank has been a co-sponsor of the Jomtien and Dakar conferences (1990 and 2000, respectively), and has assumed the challenges of the Millennium Declaration. The bank's strategy has focused on outcomes in primary education and in education for women, placing emphasis on the quality of achievements in education. The Inter-American Development Bank

(IDB) finances projects in education in order to foster better integration of educational activities within the national development strategies of member countries.

Various organizations within the United Nations system contribute to the development of education and have adapted their strategies for making progress in achieving the Millennium Goals and EFA. Among these agencies are: UNESCO, UNICEF, UNFPA, UNDP, UNHCR, and UNRWA.

UNESCO is the only organization within the United Nations system specifically dedicated to education. For this reason it is assuming growing leadership and coordination tasks in multi-lateral cooperation. In its condition as a technical and intellectual cooperation agency, the budgetary resources of UNESCO are smaller than those of other financial cooperation organizations. This makes its leadership and initiative coordination tasks more difficult where different agencies of the system compete.

Two substantive areas are key in regard to the role of UNESCO, given the comparative advantages that it holds in both. The first has to do with the production and up to date and reliable information on education, in order to provide follow-up for the fulfillment of the goals of EFA and the Millennium Goals. This task is carried out by the Institute of Statistics of UNESCO. The other priority area is that of monitoring and support of the quality of education in countries of the region. In this, UNESCO has a key role.

The strategic plan of UNICEF for the medium-term (2002-2005) establishes five priorities, two of which are related to EFA: the education of girls, and early childhood development. The UNHCR is concerned with the question of refugee and displaced children who are not covered by education agencies. Concern for the education of refugee and displaced children should be shared within the United Nations system. The ILO, for its part, has placed on the agenda the theme of child labor as an obstacle to achievement of the EFA goals.

There are other cooperation organizations concerned with the development of education in the region. These include the Organization of Ibero-American States and the Organization of American States —responsible for follow-up of the Summit of the Americas; the Andrés Bello Agreement, that cooperates through its Executive Secretariat, MERCOSUR, which includes the countries of the Southern Cone, CARICOM, in the Caribbean region, and the Central American Cultural and Educational Coordination body.

Due to the low level of results attained in education compared to those expected in various action plans carried out with international cooperation during the last 40 years, there is growing recognition on the part of various actors of the need to assess and to modify traditional cooperation structures. Nor has the monitoring of processes been sufficiently systematic for successive plans to benefit from the results obtained.

Multilateral cooperation organizations that seek to foster improvements in the field of education are also in some cases large multi-lateral banks. As such, their function is to loan money. Such a need tends to generate "pressure to make loans". Even laudable (financial) goals such as maintaining a net positive flow of resources from the banks to beneficiaries produce the effect of giving priority to large loan operations that are easy to set up and to process. Frequently, this philosophy influences the size of projects and the mobility of their execution (the use of execution units of the project). This also explains the reluctance on the part of banks to become involved in participatory activities and those of small scale.

Due to the fact that each international cooperation organization represents only a part of the total international cooperation effort in the beneficiary country, no one receives clear recognition

for the successes of such efforts or assumes clear responsibility for failures.³⁸ This results in what economists have called "problems of a common good" in the face of which nobody is fully responsible for the outcome of activities. If all of the multiple donors seek to optimize the success of their own projects instead of concentrating on the well-being of the education system of the beneficiary country, the over-all impact that international cooperation has on national education efforts will be less than it could be. The idea of coordinating aid directed at education has been suggested on different occasions, but the economic literature of recent years has made it clear that the transaction costs associated with coordination exceed the value of the benefits that such coordination brings to any individual donor. A solution for the problem of fragmentation would be to name a "Principal Donor" or "Principal Donor of the Sector" to assume responsibility for outcomes of international cooperation activities. The best solution would be for the countries themselves to assume responsibility for the aid that they receive, such as has occurred in countries such as Botswana.

International cooperation organizations prefer to operate within project modalities when granting loans or donations, since projects can be valued just like an investment, easily monitored during execution, and assessed once they come to an end. Projects make it possible to clearly identify how the resources provided by the international cooperation organization are used, and facilitate identification of which organizations will be responsible for what activities in order to give due recognition and to guarantee an "exit strategy" so that international cooperation organizations may terminate a specific initiative. In addition, projects facilitate the application of strict controls on certain activities as, for example, acquisitions and allow for the creation of specialized units designed to accelerate execution. However, project-based financing does not strengthen the ability of a country to manage the improvement initiatives of its own sectors; nor does it allow transferring skills and experience to local staff or integrating activities associated with the projects with regular operations of ministries of education. In addition, project-based financing fosters the "poaching" of personnel to work in elite enclaves dedicated to project execution.

Significant changes in the relation between donors and partners, and in the impact of technical and financial flows, require to consider the following suggestions:

- In order to be sustainable, efforts should be in accordance with the reality of the partner country. The attitude that "one size fits all" will not produce the desired results.
- Changes are required in the attitudes of donor countries and international cooperation organizations, moving from top-down imposition toward a more equal partnership.
- In order to be more effective, cooperation should respect the priorities of the partner country in the sense of being compatible with international goals and policies. Technical assistance should not be delivered through projects that are not integrated into the development plans of partner countries.
- The donor-partner relation should be built on a predictable basis in which the commitments of the partner country is as important as the external assistance of the donor. Partnership relations should be developed that contain mutual accountability mechanisms.

(c) Making greater use of international philanthropy

Governments of the region can encourage the governments of developed countries to provide incentives to businesses, persons, and organizations that are willing to donate resources through philanthropic channels. Among the countries of the OECD philanthropic donations are a common

³⁸ Brautigam, D. (2000) *Aid Dependence and Governance*. Stockholm: Almqvist & Wicksell International; Knack, S. & Rahman, A. (2003) "Donor Fragmentation and Bureaucratic Quality in Aid Recipients". Paper presented at the 2003 conference of the International Society for New Institutional Economics. Available at: www.isnie.org/isnie2003.htm.

practice. In the United States alone, it is estimated that during 2003 people donated nearly 250 billion dollars to different initiatives. It is estimated that during recent years, 30 billion dollars in donations have been given to primary and secondary public schools annually. Some of these resources reach Latin America and the Caribbean through philanthropic organizations that finance specific projects in the region, but these represent an almost insignificant proportion of the total.

Obtaining a greater proportion of these resources could be a diplomatic objective of Latin American and Caribbean countries. The region could make a united effort to increase its share of these resources in order to meet education goals. There exists a broad possibility of negotiations with the governments of developed countries in areas that can be of mutual interest; a more educated region can raise its standard of living and reduce inequalities, increase governability, provide greater trade, and subsequently more interchange with industrialized countries.

To this end, efforts could be made so that institutions and persons in industrialized countries can make direct donations to education projects aimed at meeting the goals that the region has set in the area of education. In proposals of this kind, the region should see to it that tax benefits received by international donors be equivalent to or above those that they receive for donating to education in their own countries.

Implementation of this policy assumes the creation of appropriate institutions that offer guarantees that the resources obtained in this form will be channeled into the fulfillment of the education goals that the region has proposed. It is important that such an institution offer guarantees in regard to the pertinent use of funds in order to support the poorest countries of the region or those which have the greatest gaps between achievement and resources in terms of the agreed-upon goals.

"Matching funds" systems can be established that make it possible to identify the effective commitment of countries to different projects. The organization in charge would issue the documentation necessary so that the developed country donor can obtain the tax benefits established by law. Financing of this institution should be supported by governments of the region and should be composed of persons specialized in the area of donations and fund allocation. It might be advantageous for the institution to have some degree of centralization in order to be able to establish priorities within the region. In this sense, this option represents an opportunity to produce a degree of support within the region from the most advanced countries toward those farther behind in terms of the goals and resources available for education. It should be noted that there is a relatively high correlation between distance from the goals and per capita income levels of countries.

III. Management

A. Management assessment: why and what for?

Education management only makes sense if it has a favorable impact on the learning and progress of students. By management we mean the organization and administration of resources in order to attain the objectives of a particular education policy. This is a process that covers everything from policy definition to the everyday activities of schools.

In order to achieve the Millennium Goals, Education for All —EFA— and development of the Regional Education Project for Latin America and the Caribbean —PRELAC— it is necessary to focus more intensively on the critical aspects of completed reforms, modernize education management in the region, improve allocation of public expenditures and international cooperation resources, and re-define composition of the use of these resources. Investments increases by themselves do not guarantee improvements in the quality, equity, and efficiency of education. For the latter, there is a lack of management founded on sufficient, valid, and reliable information that make it possible to make proper decisions.

In the proposal that they submitted to governments of the region more than a decade ago (ECLAC-UNESCO, 1992) ECLAC-UNESCO noted the need to overcome the relative isolation of education systems in order for them to respond to the requirements of modernity. It was suggested that attention be given to four instrumental dimensions:

responsible school management; profession enhancement and active participation of educators, the financial commitment of society to education, training, and scientific technological efforts, and regional/international cooperation. Subsequently, in MINEDLAC VII³⁹ the ministers made a commitment to improve management capacity through more active participation of the local education community and a more strategic role for central administration. This goal was also included in PRELAC (Havana, Cuba, November, 2002) committing Ministers of Education to give special attention to five strategic focuses that include the management of education systems: the management of ministries, education and decentralization, social responsible for the outcomes of education, and school management and teachers.

The education "enterprise" is very large, both in the quantity of students served as well as the number of families involved, the quantity of personnel employed, the diversity of educational institutions, and the volume of physical, material, and financial resources used. This, united with the expectations that society has of education, requires of education systems efficient and effective management. In order to appreciate the magnitude, note that within the region approximately 110 million of its inhabitants are children between 5 and 14 years of age—which in most of the countries corresponds to the ages for attending the primary and lower secondary levels—and some 50 million are young people between 15 and 19 years of age which in most cases corresponds to the ages for attending lower and higher secondary school.⁴⁰ Within the region, the heterogeneity of demographic profiles between countries results in very diverse demands on education systems. In 22 of nearly 30 countries for which information is available, more than 30% of the total population are of the ages to attend primary and secondary school, and in some countries—Guatemala, Haiti, Nicaragua, Honduras and Belize—the proportion of the school age population is nearly 40%.

Given such demand, the resources allocated to education are insufficient if one wishes to achieve in the course of the next decade significant achievements that involve greater equality of opportunity and societies with adequately trained human resources and with responsible citizens who can participate in their countries' development. The efforts carried out during the last two decades—system reform, improvement programs, investment projects, and various activities designed to strengthen quality—have not produced to date all of the positive effects expected in terms of improvement of quality, equity, and efficiency in spite of the resources and efforts invested and the commitments made at the Conference of Education for All held in Jomtien in 1990 and ratified in Dakar in the year 2000. We thus face a situation that demands creating new paradigms.

Based upon agreements reached in PRELAC⁴¹, in the following sections we will analyze education management in this order:

(i) institutional changes aimed at making education systems more modern, flexible, and decentralized, and which seek to assure that both formal and non-formal schooling fulfill the requirements of quality, equity, and efficiency in offering learning to all; ii) social responsibility for the outcomes of education; iii) the situation of the basic educational unit—the school—as the central focus in the educational process; and iv) management from the perspective of teachers, as central actors in the school-based teaching and learning process. These four topics serve to access education management as a function of the learning outcomes of the region and to arrive at a judgment regarding successful and unsuccessful experiences from which we may extract lessons to aid in formulating proposals. In order to assess management, one must perceive how social responsibility for education is assumed in the region. This requires that governments have the

³⁹ Source: Education Panorama of the Americas, UNESCO-OREALC, 2002.

⁴⁰ Recommendation of the Seventh Meeting of Ministers of Education of Latin America and the Caribbean (MINEDLAC VII) Kingston, Jamaica, May 13-17, 1996). In Bulletin 40 of the Major Project of Education in Latin America and the Caribbean. UNESCO-OREALC, 1996.

⁴¹ Regional Education Project for Latin America and the Caribbean. PRELAC. Follow-up Model - support, monitoring, and assessment - of the Regional Education Project for Latin America and the Caribbean. Declaration of Havana. UNESCO. (November, 2002).

political will to generate conditions and mechanisms to foster participation of the population at all levels of the system.

The better is management, the greater the possibility of attracting additional financing. In order to diversify financing sources and actors, a dynamic must be created in which additional financial resources would produce a greater and better impact on education in society.

B. School management at the service of learning

Recent studies have shown that with comparable investments, some countries do "something" different than others in managing educational processes and achieving better outcomes. (Winkler, 1997 cited by Delannoy, 1998). A clear example of this can be seen in a comparison of TIMSS tests carried out by Ludger Woßmann who examined the scores of 260.000 students in 39 countries and arrived at the conclusion that "The wide international differences in student in tests of cognitive achievement cannot be explained only by differences in the resources available to schools. Rather, they are caused principally by the differences in the schools of education systems". The study adds that, "the positive effects in student achievement stem from centralized testing and control mechanisms, the autonomy of schools in personnel and decision processes, from the influence of individual teachers in ways of teaching, from the limits of influence of teachers' unions on the curriculum, of examination of student achievement and the competition of private schools". (Woßmann, 2001).

1. Structural problems of school management

In most of the countries of Latin America and the Caribbean, education systems are extremely centralized. Even in countries that have made great efforts to decentralize authority through the creation of regional or provincial administrative assistance units, control over basic decisions

—including the distribution of resources— continues to be strictly controlled by the central level. In theory, centralized administration can facilitate program and project execution at the service of effective learning if it establishes fluid participatory mechanisms. But in practice, centralized management has produced increased separation of the major actors that could trigger changes in education processes. It is therefore necessary to modernize the management models current in the region within a flexible and open organizational framework able to manage and guide change in a complex system during times of turbulence and rapid transformation in the forms and contents of knowledge.

Another obstacle to be overcome in order to move toward education policies that exhibit continuity, progressive changes, and a strategic approach is the high turn-over in posts that involve policy-making and planning. In Latin America and the Caribbean, the mandate of a Minister of Education is considerably shorter than those of other ministers. In some Latin American countries, the average time in the post is between one and two years. These frequent changes in leadership produce confusion and discontinuity in regard to goals and priorities. A new minister wishes to leave a "mark" on the education of his or her country; a decision that often involves the adoption of ideas and ideologies that permanent staff, and perhaps teachers as well, may not consider central or that require more time in order to assimilate than the time that the minister will remain in the post. Such turn-over also often provokes changes in mid-level posts as well.

Another factor that can have a negative impact on the quality of management is the low salaries received by permanent staff in most ministries of education in the region. It is impossible to attract highly qualified professionals to a career that offers the prospect of low pay or few opportunities to professional enhancement. In general, changes in education systems are accepted very slowly. Attempts to modernize the State, or the "re-engineering" of public administration has

rarely taken hold in ministries of education, which are perceived as one of the governmental sectors most resistant to change. Many observers have noted that—in contrast to the situation of agriculture, medicine, industry, or engineering—pedagogical methods and technologies have not changed substantially since public education began to spread in the XIX century.

2. Opportune use of resources and time

Current spending absorbs almost all of the resources of the education sector. In the OECD countries, the average weight of these expenditures is 92% of budgets—similar to Peru, Chile, and Uruguay, and somewhat lower than the 95% spent by Argentina, Brazil, and Mexico (Aguerrondo, 2003). This means that, in general terms, countries have available only 5% to 10% of their education budgets for capital expenditures, among which the greatest input is the cost of school infrastructure, including installations and basic equipment.⁴²

Education infrastructure has an extended useful life (various decades), but is static; while the population is mobile. This can cause imbalances that result in the co-existence of regions with sub-utilized infrastructure and with infrastructure needs not covered in others. Usually, the areas of the greatest over supply are in rural areas, where the population migrates, and in city centers, above all when these change from residential to non-residential.

This has various implications. One is on calculation of the investment of international loans. The procedure that tends to be followed in allocating investment in infrastructure projects considers the school as if it were disconnected to what takes place in its surroundings. The undesirability of this approach has been demonstrated by a model developed by the Social Development Division of ECLAC⁴³ which sees investment as well as access costs as direct consequences of school placement. It is important to note these aspects and the need to integrate them into discussions on the need for greater efficiency in education management. In addition, in the distribution of infrastructure supply one should take care to identify the correct number of schools for a given population, according to its territorial and age distribution.

Within the framework of management optimization processes, decisions in this matter should be planned at various levels. On the one hand, the area of central administration is essential because here one requires micro-planning mechanisms—school mapping—that take into account past flow trends and which can predict localized growth of the population. There is also room for decisions at other levels, given that *how* schools are built and *who* builds them are decisions that invite regional and even local participation. There are interesting experiences that show that decentralizing resources for building construction or maintenance to the school level produces a number of positive effects,⁴⁴ although requiring the re-organization of central structures so that they are able to effectively manage these new procedures and, above all, that specific accountability mechanisms are included for those who receive these new responsibilities. Both things assume a progressive and planned processes of institutional learning.

In spite of the fact that material resources—and their management—undoubtedly are important in the mix between quality and efficiency in education, they are subjects that have received little discussion about which we lack pertinent information and rational allocation criteria. A relevant aspect to consider is the incidence of size of the school group—the number of students

⁴² Refers to building costs (construction, maintenance and services) and its basic equipment (tables, chairs). Laboratories, books, and computer facilities are considered learning resources and are not treated here.

⁴³ ECLAC, Seminar on Location of Education Infrastructure. Santiago, Chile, November, 2001.

⁴⁴ The Education Plan of Argentina (1993-1999) carried forward a strategy to eliminate *rancho* type schools—precarious buildings in rural areas which could not be eradicated, among other reasons, because the traditional school construction model utilizing public bidding involving construction companies from large cities resulted in very high costs. Passing the funds to the school or allowing construction to be decided and carried out at the local level made it possible to lower costs per square meter by 30%. (Cf. Ministerio de Cultura y Educación (1999). In the State of Minas Gerais in Brazil, the transfer of resources for building repair and minor construction led to savings of up to six times the amount spent when the system was centralized between 1991 and 1996).

per classroom— on the costs of education services and the time —daily and annual— of learning offered at each level of education. The current pedagogical model contains unquestioned underlying premises and it is largely ignored that this determines, for example, the design of school buildings and their basic equipment.

Specialists agree that classroom size should be up to 25 students at the pre-school and primary levels (up to approximately the 3rd grade) and in special education classes for children with disabilities. This leaves a wide margin for larger groups during most of the education cycle, which could certainly have important implications on the costs of the service.

Just as education research runs counter to the myth of class size, it has also demonstrated that the time of exposure to learning has a direct relation to student achievement. This is related to the number of days during the school year and with the number of hours of the school day. There have been attempts in the region to modify the duration of the school day to move toward full days.⁴⁵ Such a change involves high financial costs in infrastructure because most school buildings have at least two shifts for two different groups of students.

Another aspect to consider in achieving greater efficiency of education systems is the school calendar, which is excessively short in months and days of class. Moreover, learning sequences are interrupted by an overly long period of year-end vacations. Some studies have concluded that students should not have the current 80 days of summer vacation (which in some cases extends to 105 days or more) as well as 14 days of winter break. With such a scheme, it is impossible to achieve 180 effective class days. The solution which is offered in other geographic areas, and which attaining up to 195 days of class, is to lengthen the school year and to include within it periods of weekly vacations that can coincide with religious festivities, patriotic celebrations, or changes in seasons. The experience of many countries that use this criterion shows that days of class are gained and learning time is less discontinuous.

Applying a new school calendar does not resolve the underlying question: the quantity of effective hours and their real use. While private schools increase their number of actual in-class hours, public schools reduce them so that teachers can deal with necessary social assistance tasks which reduce the possibilities of concentrating on what is most essential: the learning process. Another option is to follow the example of Ecuador and apply a differentiated school calendar according to the area of the country.

Another factor related to the efficiency of spending on education is the cost of services (water, electricity, gas, telephone, internet connectivity, and others) and of building maintenance. These are not generally within the priorities contemplated in budgetary allocations, since the percentages involved are not important compared to the entire budget of the sector. The problem is that, by viewing them as residual categories the consideration of which may be delayed in favor of other areas that have fixed investment priorities, one underestimates the importance of an adequate environment in the quality of supply and in the disposition of students. By not giving priority in the allocation of spending to a subject that is highly relevant in its impact on learning conditions, one incurs inefficiencies that could be avoided.

3. Decentralization and its impact on learning

The ECLAC/UNESCO proposal (1992) noted that the functioning of education systems can agile, flexible, and acceptable. The fact that this does not occur in practice, and that these systems tend to be rigid, slow-reacting structures that are resistant to external demands and challenges is due to a number of factors, among which are the excessive centralization of these systems. The ECLAC/UNESCO proposal suggested an institutional strategy for "re-organizing education

⁴⁵ The country that has progressed most in this area is Chile, which more than ten years ago began a program of a full school day for all schools.

management aimed, on the one hand, to decentralize and grant greater autonomy to schools and other educational institutions and, on the other, to integrate them into a common framework of tactical objectives since this is the only way that education can contribute to strengthening the cohesion of increasingly segmented societies". True decentralization means, within this framework: autonomy, project meaning, institutional identity and initiative and management ability located within schools themselves. The proposal added that coordination of education systems should be assured through a minimum but effective set of public, not bureaucratic, regulations and, to the extent possible, exercised at local and regional levels.

During the last two decades, Latin America has been the epicenter of education decentralization reforms (Di Gropello and Cominetti, 1998; Winkler, 1999), with experiences that vary in the degree of effecting less concentration. Three questions deserve to be considered in this respect: (1) What education decentralization model has been adopted in Latin America? (2) What has been the impact of decentralization of education on learning outcomes in the region? (3) Why has the decentralization of education not yet shown progress in efficiency and in academic achievement to the extent anticipated? (Donald Winkler, 2003).

(a) Forms of decentralization

Education decentralization involves the transfer to the local, or school level, of decisions and resources that affect the management and quality of the service. A clear definition of education decentralization should include three elements: (1) the form of decentralization adopted, (2) the level of government to which decision-making power is transferred, and (3) the specific decision-making areas that are transferred (financial, pedagogical an/or administrative control, including personnel).

Education decentralization may combine different levels with different functions. On the one hand, the major responsibility for financing and delivering education services may be transferred directly to schools, or to a sub-national level of the State that for its part can then opt to decentralize even more or to delegate its powers (e.g., a municipal authority may assume new responsibilities at the school level). On the other hand, decentralization may transfer to a sub-national government the right, although not the obligation, to help finance and to provide education. In some countries, municipalities contribute significantly to school construction and maintenance although they do not have the obligation to do so.

A study on decision-making in education carried out by the OECD with the participation of its member states reveals that some educational functions have been decentralized although remaining within centralized systems; while others have been centralized although existing within decentralized systems. For example, schools make the majority of decisions on how to organize instruction, even in centralized systems. On the other hand, the central government and ministries make most decisions on common curriculum content, even in decentralized systems.

Determining if an education system is centralized, not concentrated, or decentralized will depend in general terms on two areas of decision-making that are particularly important. The first refers to which level of government fixes salaries, recruits, assesses, and promotes teachers, given that in most countries the salary paid to teachers accounts for 90% of current spending and that teachers are the central actors in education.

The second area of decision-making refers to the degree of control that Ministries of Education of the central government exercise over the flow of resources received by sub-national governments, which controls local education budgets and spending decisions. It is also important to determine the degree of individual school financial, administrative, and pedagogical autonomy.

Five countries —Argentina, Brazil, Colombia, Mexico, and Peru— have transferred significant education responsibilities to regional governments. Few countries in Latin America have

chosen to municipalize education. The exceptions are Chile, Brazil, and to a lesser extent, Colombia. Each country has adopted a different model. Various countries, including El Salvador, Honduras, Guatemala, Nicaragua, and Brazil—and some regional governments within these countries—have opted to delegate financing responsibilities to local school committees. (Donald Winkler, 2003).

(b) The impacts of decentralization on learning

In principle, decentralization should cause an improvement in teaching outcomes by increasing innovation, the participation of parents in the education of their children, and in accountability both for the "clients" (parents) as well as for the higher levels of Ministries of Education. In practice, some of these impacts have not occurred.

Very few rigorous assessments have been carried out on the impact of decentralization on learning and, for reasons mentioned before, their results have generally been ambiguous. An assessment of the EDUCO schools in El Salvador shows that—controlling for other factors—cognitive achievement in these schools does not exceed that of traditional public schools (Jimenez and Sawada, 1998). However, another assessment carried out in autonomous schools in Nicaragua concludes that the schools that applied the autonomy model—measured in function of the degree of power shown in decision-making—exhibited higher levels of academic achievement (King and Ozler, 1998). In addition, a study of decentralization reforms in Brazil shows that the creation of school councils and the direct transfer of resources to schools has a result a lower rate of behind grade students, although in some Brazilian states one does not perceive a statistically significant relationship with cognitive achievement of students (Paes de Barros and Silva Pinto de Mendoça, 1998). Moreover, the selection of school principals by school councils is positively associated with the cognitive achievement of students. A fourth study, this time conducted in Argentina, shows that decentralization toward the provinces is associated with higher scores on tests routinely administered to students, especially in provinces that do not present fiscal deficits (Galiani and Schardrosky, 2002).

This illustrates the need and the importance of systematizing the decentralization experiences carried out in the region and their impact on learning outcomes in order to obtain lessons that help to improve their effectiveness. It is considerably easier to measure the impacts of decentralization in terms of its intermediate outcomes such as the participation of parents in schools, teacher absenteeism, student absenteeism, and resource allocation indicators than to do so regarding learning. For example, in El Salvador, EDUCO schools, assisted by strict monitoring exercised by the community, and considering sanctions of contract cancellation of teachers whose absenteeism exceeded the average observed at traditional schools, showed less days of absenteeism among teaching personnel. In addition, it was shown that the probability that parents involved in the EDUCO program participate in daily classroom activities was three times higher in these schools than in traditional schools. It was also shown that the probability of teachers visiting the families of their students to inquire about non-attendance of a student was much greater in the EDUCO schools than in traditional public schools. In Brazil, the creation of school councils and the direct transfer of resources to schools was associated with better student attendance rates. Undocumented information from other countries shows that decentralization at the school level tends to intensify parent participation in school activities and to reduce both student and teacher absenteeism (Uemura, 1999).

Decentralization creates the potential for innovation for sub-national governments or for schools. Such innovation may be applied to the process of the acquisition of goods, to the mechanism for transfer of money to schools and/or governments, to strategies for encouraging good performance, to procedures for naming school principals, to mechanisms for the participation of parents in schools, and others. Much empirical information is available within and outside the region that shows that such innovations occur in decentralized settings. However, the innovations

and their positive impacts still appear to be far from optimum in most countries. This may be explained by four factors: (1) inadequate attention and support from Ministries of Education; (2) networks that are unable to or inefficient in disseminating successful innovations; (3) inability to extend innovations that have been successful; and (4) administrative discontinuity due to changes in governments or ministries.

Since innovations are among the potential benefits of the decentralization of education, Ministries of Education should formulate policies and programs designed to stimulate them, award them, and disseminate them. Various ministries have adopted policies that facilitate the granting of bonuses to support education projects within schools. These policies—which tend to be short term—should have a greater time frame. They should be accompanied by technical assistance to schools in order to stimulate the creation of new approaches to resolve their problems.

Moreover, Ministries of Education, teacher unions, and other actors should disseminate known successful innovations through their professional networks. In spite of the success of such networks as Brazil's National Council of State Secretaries of Education (CONSED), generally, Ministries of Education in Latin America do not appear to be interested in stimulating innovations nor in disseminating their results. While in the OECD countries there are a number of professional associations that play a vital role in the development of networks—of school councils, school principals, finance employees, among others—in most of the countries in Latin America and the Caribbean such networks are very weak or insufficient. In order to strengthen this area, OREALC/UNESCO-Santiago has created the Education Innovations Regional Network—INNOVEMOS—which is an interactive permanent forum for reflection and for production, exchange, and dissemination of knowledge and practice regarding innovations and change in education.

Finally, there are many examples of successful pilot programs that involve autonomous schools and that utilize interactive teaching methods which have been much studied and utilized in other contexts. In some cases, the cost of these programs is too high for them to be expanded; but in others, they are not replicated or applied in a greater scale for policy reasons or due to bureaucratic restrictions of the system.

4. Resource allocation policies and equity

Equal provision of quality education is the mark of excellence of education of any country. It is not surprising, therefore, that nearly all of the large education reforms during the last 4 or 5 decades, both in industrialized and in developing countries, have included among their goals the provision of quality education for all students at all levels of education (Errol Miller, 2003).

The policies and procedures for assigning education resources affect expected results in terms of quality learning with equity. Resources can be allocated to subsidize supply or as vouchers to meet the demand for education. In both cases, it is vital to consider how much of these resources actually reach the school and whether there is a significant difference between the estimated costs per pupil for allocating resources in the education system and the real expenditure per pupil in school. The larger the difference, to the benefit or detriment of real expenditure per pupil (depending on school characteristics and location), the slimmer the chance of achieving quality education with equity and system efficiency.

When defining equitable resource allocation policies, it is therefore necessary to clearly identify who is really being funded and to what extent resources remain at the intermediate administrative level to finance bureaucracy. Also essential is a tax audit to provide information on accountability.

All countries should identify within their school-age populations those who currently do not receive the benefits that one expects from an education system. At the global level, these

populations not only include children and adolescents who are among the poor. Also part of this group are refugees from countries in crisis; those coming from areas that have suffered large-scale natural disasters; those who have some kind of disability; and those coming from households in which the parents have or have died from HIV/AIDS, malaria, and other chronic diseases.

Currently, children at-risk of not completing primary education are those whose parents cannot send them to school in a regular manner, cannot maintain them in good health or properly fed, cannot provide them with the basic necessary materials nor provide their children's schools with the resources necessary for good functioning. Frequently, these children attend school in poor urban communities and in remote rural areas in which schools are poorly equipped and supervised, the teachers are not adequately trained, and the learning environment is precarious and obsolete.

In order to assure equity, policy-makers have adopted strategies to direct resources and efforts to low achievement schools that serve underprivileged population groups. In the region, programs of this kind have used different approaches and assumed distinct forms. Among them, perhaps the most well-known is the *Escuela Nueva*, which began in Colombia and has been replicated in other countries of the region. Another Colombian-based initiative has been to provide vouchers to low-income students in order to allow them to attend private secondary schools operated by religious groups. The P-900 project, developed in Chile beginning in 1990, focused resources on schools located among the lowest 10% in terms of student achievement in reading and mathematics as measured by tests of learning quality (although the poorest rural schools were not included in these tests). The compensatory program that was designed for these schools included the provision of textbooks, classroom libraries, teaching assistants, and teacher training. The experience began with 900 schools, and ten years later it included some 2,500 schools. Test results show a substantial improvement in achievement levels of their students. (Schiefelbein y Schiefelbein 2003 y Carnoy 2002).⁴⁶

Schiefelbein and Schiefelbein (2003) and Carnoy (2002) have identified other successful experiments aimed at directly facing the problem of low school achievement or poor student performance who come from poor families.⁴⁷ The results of many of these experiments still need to be consolidated and documented. However, it does not appear to be premature to state that a number of these initiatives seem to be promising and could eventually improve the academic performance of groups with lower achievement and have positive impacts on equity.

From the lessons learned from these experiences one may derive criteria regarding how and in what to spend additional resources in order to have a greater impact on low-performance groups.⁴⁸ First, it is necessary that objectives to be attained with these kinds of policies be very clear, both in terms of target groups as well as the expected results. Second, it is not sufficient to increase resources; it is also necessary to change the school structure and to provide incentives to teachers and to schools. Third, one should utilize all available resources, particularly parents, students themselves, and communities. Fourth, it is important to consider that target programs designed at the central level are useful when one wishes to impact a relatively homogeneous student population who share the same kinds of problems. However, programs so designed do not permit distinguishing differences between students or schools that face different kinds of problems or

⁴⁶ However, various problems should be mentioned (Wolf, Schiefelbein and others, 2002): one-third of the schools did not improve their student test scores. It appears that school improvement has a limit beyond which progress is not apparent, and since 1996, these schools have not shown improvements in test scores.

⁴⁷ The *Northwest Education Program* in Brazil (Harbison and Hanusek 1992); the *Social Plan of Argentina* aimed at rural schools and low-income secondary students, seem to have had positive impacts on school performance (Carnoy, 2002); The *Accelerated Learning Program* of Brazil appears to be efficient in terms of improving teaching (Schiefelbein, Swope and others, 1999, and Oliveira, 1998); The *EDUCO Project* of El Salvador. Ministerio de Educación (1996); the *Comprehensive Primary Education Improvement Program* in Uruguay, designed to improvement the performance of third and sixth grade students and directed at at-risk students, has demonstrated significant progress (ANEP 1998, and Filgueira and Martínez, 2001. Experience of accelerated classes in Brazil.

⁴⁸ See González, Mizala, and Romaguera, 2002.

relative disadvantages.⁴⁹ Fifth, the major priorities should be to improve the quality of teachers and to generate incentive so that the best teachers are retained in low performance schools. Moreover, teachers should have available various alternative methodologies and continual technical assistance. Sixth, it is important to implement systematic periodic assessment processes that provide feedback on different strategies utilized so that these strategies can be corrected and improved.

A decisive factor is strengthening the managerial capacity of low-performance schools (ECLAC/UNESCO, 1992). To this end, States should be able to offer these schools technical support and to support them during while these schools create and initiate their own education projects. The idea is to foster within every school, especially in those which at the beginning of the process exhibit lowest performance and fewest resources, the ability to develop autonomous projects to improve quality based upon their own experiences and needs.

Finally, current debate points to a dilemma with clear implications for the role of system management in fostering the cost-effectiveness of greater equity in education. On the one hand, one argues for the targeting of resources into specific programs to benefit the most vulnerable groups; on the other, it is stated that it is necessary to revise education and resource allocation policies in order to integrate equity and quality into the entire education system. Probably, the optimum solution lies in a combination of both criteria.

5. Information and knowledge for improving management

As ECLAC/UNESCO stated in 1992 (op. cit.), optimum internal and external functioning of decentralized education systems requires effective information and school and teacher assessment mechanisms. There has been progress in the region in this regard, but it is imperative to improve the common base of information on education. Optimizing statistical information requires, among other things, constructing statistical capacity within countries. If what really matters—in the spirit of the Millennium Goals and those of EFA—is the learning of basic life skills, then data on access to education are not sufficient. One needs reliable information on how many young people are excluded from education, including those who have never had access as well as those to have not completed school for different reasons. Enrolment rates should be complemented with completion rates. This latter information is not available in for many countries, and hinders establishing comparisons and assessing progress in these areas.

One of the key subjects for which gaps in our knowledge exist is achievement assessment. The subject is essential because it is not enough that young people complete the years of formal education; they must also acquire the skills necessary in order to be effective as workers, citizens, or family members. One must assess education quality and determine whether education investments have an impact on society. New indicators must be developed in order to assess educational achievement and to determine where reforms are needed. It should be noted that some initiatives have been developed in this area.⁵⁰

In order to foster the proper use of timely information the object of which is to improve management of systems at different levels, it is necessary for each country to have sufficient capacity to produce education statistics, assessments, and research, and that they have access to the research literature on their respective school systems in order to guide changes and activities. One cannot efficiently manage a reality one does not know. In this regard, the region possesses little information and knowledge on key aspects that influence management decisions. Many countries do not have information on the actual numbers of teachers; their enrolment data are only

⁴⁹ In this sense, the participation of schools is important in the implementation of these policies when the student population is heterogeneous.

⁵⁰ For example: The “UNESCO-UNICEF monitoring learning achievement” project. UNESCO has also supported qualitative assessments of this kind in a number of regions. In LAC there is the Latin American Laboratory for Assessment of the Quality of Education - LLECE - coordinated by UNESCO/OREALC.

approximate; and there is no systematization of procedures or compilation of norms. Important subjects that influence the quality and pertinence of education services are only addressed in informal meetings and are rarely approached systematically using reliable and up to date information. As long as information is casual and unconsolidated, the quality of management will suffer because there is no access to comprehensive diagnoses of critical aspects of education, assessments based on needs, nor adequate knowledge for developing long-range strategies (Carlos Muñoz Izquierdo, 2003). An additional problem is the use of information and knowledge —how it is presented and disseminated.

These limitations have been remedied, to a certain extent, by universities and non-governmental organizations and by organizations that provide external assistance to governments of the region. On the other hand, some non-governmental organizations have carried out strategically important functions in this field. Note should be taken in this regard of the *Centro de Investigación y Desarrollo de la Educación* [Education Research and Development Center] (CIDE), an institution created in Santiago, Chile in 1964 that founded and coordinates the *Red Latinoamericana de Información y Documentación en Educación* [Latin American Education Information and Documentation Network] (REDUCO; the *Programa para la Reforma Educativa en Latin America* [Latin American Program for Education Reform] (PREAL), a more recently created organizations that also has its headquarters in Santiago and that administers another data bank on educational research; the *Centro de Estudios Educativos* [Center of Education Studies] (CEE), an institution founded in 1963 in Mexico City that publishes the *Revista Latinoamericana de Estudios Educativos*; the Fundação Carlos Chagas [Carlos Chagas Foundation] (of São Paulo, Brazil) that publishes *Cadernos de Pesquisa*; and the Centro de Reflexión Pedagógica y Experimentación [Center of Pedagogical Thought and Research] (CERPE), established in Caracas, Venezuela.⁵¹

Within countries, universities have historically played a research role; but the very limited resources available for such activities have limited their importance. On the other hand, non-governmental organizations, with the financial support of various public and private international agencies have developed a growing capacity to carry out research in this field. On the other hand, relevant knowledge in regard to research findings and to "best practices" is not widely circulated or used in countries in the region. Efforts to disseminate information generated by research activities such as the *Red Latinoamericana de Información y Documentación en Educación* [Latin American Education Information and Documentation Network] (REDUC) represent steps forward in the desired direction. Activities such as the INNOVEMOS network of OREALC/ UNESCO-Santiago —that distributes information on successful innovations in the fields of professional and institutional development, teaching and learning processes, and equity and diversity, among others— are signs of progress in the dissemination of useful information.⁵² Recent publication of the book, *Buenas Prácticas, Programa para la Revitalización de la Educación en Latin America* [Best Practices: a program for the revitalization of education in Latin America] (PREAL, De Andraca, 2003)⁵³ is another practical example of an initiative to disseminate information on "what produces results" based on the experiences of Latin American countries.

Finally, the production and dissemination of information and knowledge is today technically viable and of decreasing cost, thanks to progress in information and communication technologies, especially the internet. Neither large investments nor great training are required in order to make such access available to a wide range of education system planners, managers and executors.

⁵¹ Also important are the contributions of international organizations and of agencies that provide external support such as the Inter-American Development Bank, the World Bank, through loans or in the form of non-repayable cooperation such as provided by the OEI, OAS, UNESCO and ECLAC, among others.

⁵² See www.unesco.cl.

⁵³ De Andraca, A. M. (Org.) (2003) *Buenas Prácticas para mejorar la educación en Latin America*. Santiago and Washington: PREAL.

6. Capacity to manage international cooperation

There are a number of factors that are influential in all aspects of national development and that have an impact on the capacity to manage international cooperation. Examples are civil conflicts, economic crises, political corruption or instability, or difficulties in State administration. The following analysis only considers problems that exist within the education sector and which have been identified as structural problems that are susceptible to change and improvement.

It is desirable that beneficiary countries assume responsibility for their own programs so they may formulate strategies and establish priorities in regard to how to optimize the contributions to their needs and objectives. Very few countries in Latin America and in other world regions have systems to manage the international cooperation that they receive. Due to the fact that cooperation initiatives with multilateral organizations tend to involve loans and debts as well as commitments to pay counterpart costs, this is naturally assumed by the ministerial sector responsible for finances (possibly associated with planning ministries). Due to restrictions on public funds in general such as those caused by frequent economic crises, countries of the region have had budgetary problems that hinder fulfillment of their obligations to pay the costs of international cooperation projects called "counterpart funds". When this occurs, international cooperation organizations (ICOs) cannot continue to liberate project funds and the activity comes to a standstill. In some cases, this results in complete cancellation of the project.

It is necessary, moreover, that national Ministries of Education supervise international cooperation in their own countries so that international cooperation activities are carried out with and through the collaboration of existing sectors of the ministry. This assures that the attention, resources, and experience of ICOs contribute to improving the managerial capacity of permanent ministry employees.

As we have noted, ICOs can foster a process that allows countries to assume ownership of their own international cooperation programs, helping to identify for the principal donor sectors that operate both with international agencies and with national authorities in the development of coherent and efficient programs. This fixes responsibilities in specific ICOs and encourages a concern for long-term results.

Given the large differences between countries in terms of managerial capacity in education, ICOs should make special efforts to aid the most disadvantaged countries to strengthen their managerial capacities. This involves guiding initiatives—in consultation with education authorities as well as with ministries responsible for finances and public services—to restructure the management of national education systems. In addition, ICOs should incorporate within projects components for strengthening the managerial capacity of education sectors in beneficiary countries. These components should be specifically designed to build long-term managerial capacities that are necessary for the efficient execution of investment projects, whether financed through international cooperation initiatives or through national budgetary allocations.

C. Social responsibility for education

In Latin America and the Caribbean, the way that systems of public instruction have been organized presents rigidities that hinder a more participatory role for civil society in education. Although these challenges are mentioned in discussion about education system reform in the countries of the region, to date such reforms have not made much progress in clearly defining the allocation of responsibilities vis-à-vis the education administration apparatus

For this reason, it is necessary for public policy to foster social responsibility for education on the part of a broad spectrum of actors, including parents and the education community, universities in education research and teacher training, ministers of finance and parliaments in the

definition of education legislation, norms, and budgets, teachers and their unions, and, especially, ministries of education themselves.

Frequently, government reforms seek to create forums that allow citizens to express their opinions in a decisive and direct manner. Different levels of government have created mechanisms to permit citizens to be heard, based on democratic principles and on the need to be provided with policy feedback mechanisms. When possible, opportunities have been created for citizen participation in budgetary decisions on decentralized levels. But the situation analyzed in the following sections shows that the strategic efforts and mechanisms fostered by States must be greater or more effective in order to produce true social responsibility for outcomes in education. This will be obtained to the extent that each actor or social institution involved in education recognizes his or her responsibility and level of participation in the results achieved, seeks the best manner to improve and perfect activities for the good of education, and is taken into account in education policy decisions made at both national and local levels.

1. Participation of parents and the education community

Community participation plays a very special role in education, given that parents themselves have a special role and interest in the education of their children. The literature is replete with information on the impact that the involvement of parents and communities has on the teaching and learning process.⁵⁴ However, it is common for teachers and school principals to not know how or don't wish to involve parents and families. At times, schools impose barriers to the participation of families because they consider them to be untrained, because this requires additional time, and because schools do not wish to be assessed by the community. For their part, families lack time, the habit, or the ability to become involved on their own initiative. Or there may be other limiting factors related to the "culture of participation". For such participation to take place, there must be information, training, and empowerment. In higher income sectors where families pay for private educational services, they feel more authorized to demand information in regard to the learning of students or regarding the condition of school infrastructure and equipment. But it is common in the system for school principals and teachers to not make available tools they make it possible for them to be assessed by families or the community.

One of the potential benefits of decentralization is to increase widespread demand for teaching and for quality teaching; a phenomenon that converts parents into better-informed "consumers" and more eloquent critics of the instruction offered to their children. Moreover, the more that parents are involved in the education of their children, the more an educational climate is developed in their homes—which clearly results in better school achievement of children and adolescents. But in order for this benefit to take place, parents must have available ways to express their demands effectively, to inform themselves about activities of the school, be able to offer their opinions regarding deficiencies of the schools in which their children study (problematic school climate, teacher absenteeism, and others), be consulted in regard to important subjects and changes in the school, and have tools available to support their children's performance. All of this requires that mechanisms, programs, and activities be adopted that are designed to attract parents to school.

2. The concept and application of accountability

Greater school autonomy recognizes the importance of accountability, the object of which is to provide information that makes it possible for the community, authorities, and society in general to know if schools are fulfilling their goals and carrying out agreed-upon functions. Accountability

⁵⁴ There is international research, and of Latin America in particular, that clearly demonstrates the importance of the role of parents at home in the learning of their children (Cueto and Secada, 2004; García, Aracil, and Winkler, 2004). Parents determine the entry age into the school system, determine how children utilize free time at home (including doing homework), and allocate household budgets for education. Each of these variables has an important impact on how much children learn and on their options for timely progress with the education cycle.

systems are associated with improvements in student achievement not only because they aid extra-school actors—from parents to central planning and assessment sectors—to demand pertinent and quality education services, but also because they introduce into schools principles of commitment and monitoring that lend a greater meaning to responsibility for school functioning and outcomes.

Commitment to accountability requires incentives. In general, teacher salaries or promotions do not depend upon their classroom performance, precisely because such performance is not assessed nor monitored. It is important to link accountability to merit systems involving awards and sanctions for teaching personnel and school administrators. In this sense, accountability and incentives are two faces of the same coin. As long as accountability is transparent, objective, and offers opportunities for joint consultation of actors, there is no reason for it to be resisted.

There are reasons that explain the lack of accountability, even in the most decentralized systems. One is that users—parents and students—often do not have a voice even in such systems. The voices of parents demanding more or better education can be extremely weak compared to those of contractors awaiting large infrastructure projects, of teacher unions demanding higher salaries, or of business people resisting higher taxes. Although the delegation of authority to schools resolves the problem of "a lack of voice"—at least in terms of some decisions—most decisions remain confined to the upper levels of State administration.

A second reason is that parents—and in many cases policy planners—possess little information on financial matters, spending, and the results of the efforts of teachers. Even in industrialized countries parents tend to be aware of the true effectiveness—the added value—of school for their children. This problem is aggravated in developing countries where parents do not even have access to the most basic information about their schools. The lack of information makes it much more difficult for parents to be heard using well-based arguments.

The absence of information—for example, regarding the relative performance of schools—also contributes to the complacency of parents, especially among those with low educational attainment, and reduces the ability of planners to implement innovations. Although currently, the countries of Latin America and the Caribbean have adopted, with different levels of development, national tests to measure the academic achievement of their students, and in this way to monitor national and regional trends, only higher income countries such as Chile and Uruguay annually submit all schools to tests and publish performance reports. There are not yet national systems that incorporate tests that measure the aggregate value that makes it possible to identify the most successful schools in terms of pedagogical results (where factors such as student background are controlled).⁵⁵

3. Responsibility of ministries of education for education outcomes

Ministries of education of countries have the social responsibility to assure that the sector and the education system achieve the objectives of education with efficiency, quality, and equity and to this end they should be accountable to society. One way to accomplish this is to strengthen quality assessment systems and the dissemination of their results in alliance with the communication media. Assessment systems can fulfill two functions (Carlos Muñoz Izquierdo, 2004). The first, of an administrative nature, is in decision-making in regard to the normal functioning of school systems. Such systems provide the data necessary, for example, for the selection of those who are admitted as students, teachers, or administrators in a given school; or for properly allocating incentives aimed at recognizing good teacher performance of those who work in a particular school; or for

⁵⁵ The subject of accountability and responsibility for results has long been a concern of a number of organizations. PREAL has introduced a new series of bulletins specifically addressing this issue. The Tinker Foundation of the United States is sponsoring a study that will be carried out by CIDE and PREAL, with the collaboration of OREALC/UNESCO-Santiago in order to introduce the concept of accountability among education policy makers and leaders in the region.

accreditation of a particular school cycle; or for informing possible clients of a school its position—from the point of view of the quality of services it provides— compared to all schools of a similar kind.

The second function of assessment systems is the production of studies that provide information (meant to be properly used—and not serve as a basis for applying punishments or to distribute incentives) regarding the quality of education offered by a particular school, group of schools, or level or modality of the system. Such studies may also provide analyses of trends and research on the factors that explain the situations observed. Such assessments can make help establish a ranking of the conditions necessary for improving education management—and therefore the quality of student achievement within schools and school systems. The outcomes of the assessments are disseminated through various documents such as: general reports; specific reports on factors associated with learning; publications directed at teachers; reports directed at families; as well as reports of results by school.

Beginning in the 1990s, various systems were created in Latin America designed to carry out this function. Assessment reports corresponding to ten countries in the region (Argentina, Bolivia, Brazil, Costa Rica, Chile, Ecuador, Mexico, Paraguay, Peru, and Uruguay) show that most of these assessment systems do not have a direct impact on schools. Besides providing relevant information to citizens, most of these assessment systems supply relevant information to three specific publics so that they may improve the quality of education. These public are: education authorities and decision-makers; school teachers and school principals; and the families of students.⁵⁶

In the Caribbean region, various countries began to put national assessment strategies in place during the last decade. However, from an operation standpoint, these strategies are still in their beginnings and are not yet linked to research initiatives on the impact of interventions or the objectives of specific reforms.

4. Social responsibilities of universities in education change

One cannot fulfill the goal of improving the quality of learning without improving the quality of teachers. This requires up-to-date and pertinent university training. In this regard, the majority of countries in the region have much to accomplish. Universities should assume the basic social responsibility of training trainers for providing knowledge to the education system. This will often involve profound changes in teacher training courses and in the development of research activities for producing knowledge.

One must close the gap between the changes that are discussed in education and the presence of emerging themes on the one hand, and the specialties offered by schools of education and pedagogical institutes on the other. In general, the education of future teachers remains static while other actors talk about significant changes from the perspective of focuses, paradigms, theoretical frameworks, methodologies and educational environments. There is thus a need for a profound change in teacher training courses in order to respond to the urgency of changes in education.

Frequently, the countries of the region lack adequate financing for research, innovation, initial training of teachers and school administrators, and for in-service training programs. The modernization of initial teacher training has moved more slowly than have changes in education in the region, and there are fewer resources dedicated to such education than for training and assessment once teachers enter the classroom. Various studies show that initial teacher education

⁵⁶ In general, the production of information by the Latin American Laboratory for Assessment of the Quality of Education (LLECE) has been incorporated in the decisions of countries, creating greater awareness of the use of this information in education policy decisions of the member countries and in education management. OREALC/UNESCO - Santiago in conjunction with the IDB. PREAL, for its part, recently began to investigate—using case studies—who uses the information generated by these systems, with what intensity they do so, and what impact it has on the activities that the users of the information develop within education systems in the region.

has a greater impact than in-service training. But teachers are still being educated using dated curricular models and then have to be trained during their careers—which is not easy, given their class loads. This leads to problems of low impact of actions and increases in costs. A pending challenge in the region is to establish effective mechanisms for universities to assume social responsibility for the results of teacher training courses.

5. Social responsibilities of finance ministries and of legislatures for major changes in education and the resources necessary to carry them out

Ministries of finance of countries and legislatures are key public actors in the process of allocating resources for the education sector within national budgets and for the assessment of the use made of these resources. The processes of programming and negotiation—within the framework of national fiscal policies—are complex and not always successful for the education sector, given limits established by economic and monetary policies. Experience shows that the dynamics of the demands of the education sector and those of the economic and financial sectors do not always move in the same direction. Moreover, there is competition with other sectors that are also part of national priorities of development that are dependent upon public resources.

Within the democratic process, legislatures are increasingly assuming greater responsibilities in the legal, normative, and budgetary design of public sectors. Education is included in this process, and a large sense of social responsibility is therefore necessary for the decisions adopted within legislatures to contribute to the development of education as a function of the commitments of EFA, the Millennium Goals, and the focuses of PRELAC. It is important to emphasize that the Latin American Parliament—PARLATINO—has expressed its political and strategic will to support the education sector in fulfillment of these country commitments.⁵⁷

6. Social responsibility of teacher unions

The traditional priority of teacher unions in the region has been salary demands. The most frequent subjects in dispute between teacher unions and governments are related almost exclusively to salaries and working conditions, education budgets, statutes related to teaching—collective agreement—and other norms that regulate work within schools, training, and professional enhancement.

Economic and social difficulties of countries, together with specific situations in each case, generate disparities between the demands of unions and the offers of education authorities. This causes multiple and sustained conflicts and strikes, with the consequent loss of class hours and a high social cost in terms of reduced student learning achievement. Teacher work stoppages are expressions of crisis and conflict within education systems. For their part, governments have, to some extent, precipitated the stoppages due to a lack of foresight and of comprehensive and negotiated policies in regard to the teaching profession.

There is no single, unified position among teacher unions in the region. But one can observe a distrust of education reforms that they define as being neo-liberal. In general, what predominates is the concept that education is the responsibility of the State and that the State, therefore, is the major provider of educational services. There are unions that argue for the possibility of greater and/or full participation in the modification of education structures, and defend the need to increase

⁵⁷ The *I Inter-Parliamentary Conference on Education* (November 5-6, 2002, in São Paulo, Brazil) organized by PARLATINO in conjunction with UNESCO, brought together the Chairmen of the Education Commissions of the member legislatures of the Latin American Parliament, along with other participants, in order to analyze the best strategies for legislatures to effectively support the development of education in the region. The meeting produced a declaration expressing the support in the activities of individual legislators and as a body for various tasks carried out by UNESCO in the region. In addition, the conference organized a network of legislators linked to the theme of education in the region.

commitments to decisions adopted in the education sector. Other groups maintain their distance in regard to changes adopted by governments which apply education policies considered to be neo-liberal.

The challenge lies in fostering greater dialogue among teachers and between them and their unions in order to promote cultural changes toward a more holistic perspective that includes teacher training, the development of effective proposals for renewed education, and which assumes responsibility for results. This is a case of combining the efforts of education professionals with authorities in the sector to place on the public agenda a collective proposal that grants priority to education and the resources it requires.

D. Schools as learning and participatory communities

1. The role of schools

The purpose of school-based education is the development of the skills and appropriation of content of culture necessary for young people to become active members of society. Education, therefore, is an activity of a social nature that is developed and takes form within a social institution: the school. Although learning increasingly takes place in many environments, schools continue to be the basic unit in which teaching and learning processes occur, and the only one able to assure equitable access to knowledge. Schools are also, after the family, the most important setting for social integration.

In order to assure that schools are truly settings for integration and that they do not reproduce social segmentation, they must bring together all children of their communities, eliminating forms of selection of different students for different motives. They should be more open to social, cultural, and individual differences in order to guarantee equity in the results of the so-called "pillars of learning of the XXI century" —learning to learn, learning to know, and learning to live together.

2. School management

Schools are where the formal education process occurs, and where the greatest efforts should be made for management of the education system. This involves three fundamental areas: teaching and learning processes; relations between different actors (teachers, students, parents, and school principals and staff) and structure and functioning. These areas, in turn, are conditioned by the culture of each school; that is, by the set of meanings, principles, values, and beliefs shared by the members of the organization that lend an identity and determine and explain the behaviors of the individuals of which it is composed and the behavior of the institution itself.

Schools, on the other hand, are influenced by the setting in which they are located. Contextual factors have an important influence on the life of schools and influence their management. The demands of parents, the geographic situation, and the community context. Therefore, analysis and understanding of schools and their management involves considering pedagogical processes, relations, functional features, their culture, and the setting in which they operate.

Schools should be open to innovative pedagogical processes, to the professional development of their teachers, and to community participation. One must assure that the educational process achieves expected results and can be manifested in innovations or effective changes that lead to more and better learning of all students, with equality of opportunity for access and permanence in the system.

PRELAC recognizes that, "the changes fostered from above and from outside schools do not achieve substantive changes in student learning. Educational practice has slight links with the decisions of planners because they depend much more upon the conceptions, decisions,

expectations, and practices of the multiple actors within the school and its community." (PRELAC, 2002). In effect, education policy comes to life and assumes concrete form within schools. It is there that changes occur in education, curriculum development, and norms. Any innovation must affect the school as a whole in order to be meaningful and to have continuity. Any process of change has organizational implications, and its success or failure depends on factors such as planning, participation in decision-making, conflict resolution, follow-up of agreements, the rational use of resources (especially of time), and leadership capacity.

This calls upon us to make greater efforts in school management in order to make them learning and participatory communities. There is increasing evidence in regard to the value added by schools, in the sense that they can alter—in more or less significant ways—the variables associated to learning outcomes through their own projects and the efforts of their members. According to a study carried out by the LLECE,⁵⁸ schools that make a difference are characterized by integrating in an organized and harmonious fashion, the plans, vision, resources, and proper interaction between education actors.

The presence of parents as significant actors within the school system, together with the increasingly active participatory role of students and united to learning processes guided by teamwork, produce meaningful and less hierarchical links between parents, teachers, and principals and school staff.⁵⁹ This occurs in schools that are open to opportunities for new programs, whether because they receive them from the central level, or because the school community itself encourages them through its own initiative. In general, these are schools with stability and continuity of principals and teachers who have leadership capacity, and where academic and managerial decisions are carried out with greater participation of the different actors of the education system.

In summary, changing the culture of schools involves:

- A shared vision regarding school objectives and adopting standards of quality through both technical and participatory processes, and which embody school educational projects and constant assessment and monitoring of the decisions adopted.
- The constant and innovative search for resources on the part of the school, and a sense of continuity of teaching staff with teachers employed full-time in a single school.
- Mutual collaboration and support between teachers, parents, and students so that all are involved in making decisions that affect them, while at the same time defining the levels of responsibility of each. In order to achieve this collaboration, it is essential to make available free time during school hours to allow teacher teams to meet among themselves and with families.
- Shared leadership of the principal with teachers, strengthening teamwork.
- Professional development and continual reflection regarding teaching practices, within a professional community in which teachers may discuss and develop together.
- Opening schools to the community, offering their infrastructure and services for recreational, cultural, and social activities. For their part, schools should participate in activities that take place in their surroundings and participate in making decisions that affect the community. Changing school culture involves going from buildings closed behind their walls to schools that are connected to their immediate surroundings,

⁵⁸ Qualitative study of schools with outstanding results in seven Latin American countries. LLECE - Latin American Laboratory for Assessment of the Quality of Education. UNESCO, Santiago. September, 2002.

⁵⁹ Based on the findings of "Qualitative study of schools with outstanding results in seven Latin American countries" (UNESCO/LLECE, September, 2002). The study focused on the search for factors associated with the results of a mathematics achievement test in schools that were part of the samples used in the First International Comparative Study.

creating networks between schools and connecting them to the global community through information and communication technologies.

School management —whether for public or private establishments— centered on learning and with community participation is essential for achieving better results. It is necessary, therefore, to both strengthen school leadership and education management skills and to design certification and incentive mechanisms to achieve quality education in schools.

3. Regarding school principals

PRELAC notes that changing the culture of schools requires, among other things, "a new organizational and normative framework that fosters greater autonomy in pedagogical and managerial decision-making that facilitates collaboration between members of the community and connections with other schools and levels of learning. Offering a variety of options, itineraries, and modalities in order to achieve life-long learning necessarily involves greater autonomy in decisions regarding curricula, modalities and forms of teaching, school hours, the contracting of personnel, acquisition of material resources, and assessment and accreditation procedures". In order for this fundamental change to occur, we must have school principals able to assume leadership in school management. This is a pending challenge. Networks are under construction in the region that can offer important support in fulfilling this task.⁶⁰ But it is also necessary that countries carry forward explicit policies for training school principals, united with incentives associated to the post of principal in order to encourage major changes in school culture.

The ECLAC/UNESCO proposal (1992) states that new institutional schemes that contemplate greater school autonomy involve a radical change in the functions of the school principal, who must assume the post not only as one more step in his or her professional career, but as an ethical, intellectual, and functional challenge, given the possibility to guide an institution and give it a new direction.

This recommendation is even more timely given the fact that most school principals do not possess the preparation that allows them to assume leadership and to stimulate teachers. Nor do they possess the necessary organizational skills. It is therefore necessary to strengthen the leadership capacity of principals so they may effectively transform the culture of schools. This is a question of generating environments that are propitious for improving teacher performance and the achievements of students with school management that is participatory, open, and learning-centered.

4. Public/private school combinations

Frequently, the term "private education" is used to differentiate private from public financing. However, in schools the sources of financing of public and private education are increasingly more intertwined. In most countries of Latin America and the Caribbean, a proportion of tax-based financing is used for private schools and, at the same time, public schools receive significant support from the private sector. It is possible, however, to make other distinctions that are more valid than sources of financing, such as the public or private character of the land and buildings, control over curricula, admission requirements, the contracting and pay of teachers, among others (Motivans, 2004). In this document, the terms "public" and "private" are used to distinguish between types of school government. An establishment may be classified as private if it is controlled and administrated by a non-governmental organization (for example, a religious group, an association, or a company) or if its direction is constituted principally of individuals who have not been by public agency, independent of its sources of financing. Even in the case of schools

⁶⁰ The Education Leadership Network, coordinated by OREALC/UNESCO-Santiago has recently been created, within the framework of PRELAC.

administered in a private manner, governments often require that the establishment be accredited by a public authority in order to provide educational services that agree with the national curricula, regulations, and standards that are required of public schools.⁶¹

It is important to distinguish between sources of financing and service providers (for example, public or private). There are three categories of schools: public, State-dependent private, and independent private. State schools are defined as those administered by the State and financed through public funds. Among State-dependent private schools are those which are administered independently although they receive substantial tax support—more than 50% of their operational funds. Private independent schools are administered in an autonomous fashion and receive less than 50% of their total spending from tax funds.

Private provision of education, independent of how it is financed (through public or private support, or through a combination of the two) has appeared in response to various factors (James, 1991). One of the most common scenarios is that which appears in the face of excessive demand in which, given the lack of public supply, the private sector seeks to satisfy. Private schools also have emerged in response to a differentiated demand; that is, the supply of special educational opportunities that are not provided by the State. These vary in form, from elite academies to schools that incorporate religious content and those that serve students who have dropped out of public schools. As a consequence, in Latin America and the Caribbean, the term "private school" can be interpreted in various ways.

In Latin America and the Caribbean, most countries have some form of private and independent schooling. Countries that directly finance private schools using public resources are much less numerous.⁶² In most of the region, there is a relatively modest private sector that includes a small number of independent private schools. In Peru, independent private schools include self-financing schools, which make up the majority. Their major sources of financing are tuition payments, complemented by donations and support from parent associations and other private entities. At the same time, the State contracts religious groups to provide education. Religious schools represent an alternative to public or private schools and are common in many countries of Latin America and the Caribbean. Another alternative which is also common in other countries is the program *Fe y Alegría*.

The *Fe y Alegría* program, created by the Jesuit Order of Peru, receives public financing, but is of a private character. Its purpose is to administer schools that operate in poor areas that do not have public schools or, if these do exist, they do not operate in an efficient manner. The *Fe y Alegría* schools enjoy considerable administrative autonomy, that includes the contracting of teachers. The *Fe y Alegría* network has spread to 14 countries in Latin America and the Caribbean and serve more than 820,000 children in remote and disadvantaged areas.

The proportion of private enrolment, considering the regional average for Latin America and the Caribbean for the 2000/2001 school year, based on unweighted averages of countries, is higher at the pre-school level (30%), followed by the secondary (24%) and primary (15%) levels. It has not been possible to calculate a regional average for the percentage of private higher education, although available information for a more limited number of countries suggests that with all probability, the figure exceeds the percentage for pre-school education. These percentages are very similar to those reported for the 1996 school year (Wolff and de Moura Castro, 2001). It appears, however, that the proportion of private education has decreased since 1990 (IEU, Motivans, 2003).

The relation that exists between the management of schools and the quality of learning outcomes is of great interest. One might well ask whether private schools are under better

⁶¹ In some countries, such as Chile, a education quality certification system is being designed according to education results achieved - (whether public or private schools).

⁶² This is illustrated by the cases of Guatemala and Chile, which have systems that subsidize the private sector. Guatemala subsidizes private primary and secondary schools. Chile uses a system of vouchers conditioned on student attendance.

conditions to supply the demand for quality education; if they are more efficient; and if they contribute to strengthening the goals of equity. International assessments show some differences between public and private schools in terms of academic achievement —although a much more detailed analysis of national assessments should be a priority for researchers.

In 1999, the *First International Comparative Study* (FICS),⁶³ assessed mathematics and language skills of 4th and 5th grade primary school students in 12 countries. An analysis of the results of the study shows substantial differences between the test scores of students enrolled in public and in private schools, although they are not as significant as those between students in urban and rural schools. According to the study, the disparities in scores obtained by students in public and private schools are more strictly related to the resources available to schools than to the family backgrounds of the students. While the policies and practices of the schools contribute to their efficiency, in this aspect it has been observed that the difference between public and private schools is very small. Analyses of the test results do not prove the presence of significant effects associated with public and private schools, while descriptive analyses indicate that private education contributes to the segregation of students of different social and economic strata (Willms y Somers, 2001).

Within countries, schools that possess greater resources are associated with better results. Analysis of data obtained from the LLECE study shows that the more efficient schools —measured based on pedagogical results after controlling for the family backgrounds of students— are those that have high levels of resources, including a low number of students per teacher, a greater quantity of pedagogical materials, a substantial library, well-trained teachers, and teachers who are satisfied with their salaries (Willms, 2000). However, resource availability in schools is not the only factor that contributes to obtaining high academic achievement. The information also shows that students who attend schools where the participation of parents is high and the classroom environment is conducive to study tend to have better academic outcomes. This indicates that the support of parents in academic activities and the application of effective teaching strategies also contribute to obtaining better learning outcomes (ibid).

Another international assessment, this time designed for secondary school students (the Program for International Student Assessment -PISA) was administered in five countries of Latin America in 2000/2001. This study measured reading, science, and mathematics skills of students 15 years of age in Brazil, Chile, Mexico, Peru, and Uruguay. As with the LLECE study, PISA showed that in general, students who attended private schools at the time of the assessment obtained better scores than their public school colleagues (OECD, 2001). In Brazil, where 11% of 15 year-old students of the same sample attended independent private schools, point scores favored the private school students in the same proportion as seen in Mexico. Nevertheless, this advantage is associated with the composition of students in each type of school. Just as with the students of primary schools, in all participating countries the students of private secondary schools come from households with higher social and economic conditions than students of public schools (OCDE, 2001). Comparative studies show that in these five Latin American countries, differences in learning outcomes observed between students from higher income families and those from poorer families is appreciable (OCDE/ UNESCO - UIS, 2003).

There is no single recipe in regard to the participation of private financing in national education systems. However, experience shows a greater participation of the private sector in upper secondary and higher education. In some Asian countries, such as Japan, Korea, and to some extent Taiwan, most upper secondary and higher education is private.⁶⁴ This does not mean that the government does not intervene; on the contrary. These governments have implemented enrolment

⁶³ First International Comparative Study on Language, Mathematics, and Associated Factors for Students in the Third and Fourth Grades of Primary School. Second Report. Latin American Laboratory for Assessment of the Quality of Education (LLECE) UNESCO-Santiago. Santiago, Chile, October, 2000.

⁶⁴ Sources: Mingat, Alain (1998).

quotas and subsidies to favor education. Nevertheless, most financing comes from private sources. Therefore, the institutions respond to market demands, with a resulting greater correspondence with labor market demand.

Private financing has also resulted in high levels of efficiency in these countries. Since the schools depend on collecting tuition payments from education consumers, they tend to use their funds in a more efficient manner. For example, one can argue that the curricula offered by schools are more coherent with the demands of the labor market. In addition, school administrators have a greater awareness of the way that they invest financial resources. Consequently, the unitary costs of private schools in these three countries are less than the unitary costs of similar public schools.

At the other extreme of the education system, if one wishes to assure universal coverage of pre-school education in Latin America and the Caribbean by 2015, together with strengthening the participation of women in the labor market, one could provide for stimuli to developing private pre-school education—with the support of companies—accompanied by a system of certification of the quality of services and education outcomes, as in the case of the process that has begun in Chile.⁶⁵

E. Teachers and their active participation in changes in education

1. Changes are not possible without good teachers

Experience most in Latin American countries, as well as the results of various studies, show that teachers are one of the most important factors for education reforms to have positive impacts on student learning and in how education is managed in systems, schools, and classrooms. If, on the one hand, change is not possible without good teachers, on the other, the professional and social status of teachers is one of the critical points of education.⁶⁶ Teachers are one of the most important causes of the problem; but they can also be the starting point for more effective strategies for transforming education.

Although this recognition of the importance of teachers is heartening, there is also a persistent and simplistic attitude that sees improvement of the teaching profession only in terms of training or of higher salaries. Certainly, both of these are necessary. But by themselves they will not improve the quality of teacher performance nor the quality of life of teachers in a significant way. The teacher question demands a comprehensive understanding and approach involving fostering professional and human development as public and education policies of countries and to be reflected in strategies, programs, projects, and actions assumed as a social responsibility and sustained through time. Only good teachers, dedicated to the task of education, committed to their work and satisfied with their professional and personal achievements can guarantee that the efforts of social and financial investment are successful and that the entire population has access to a quality education.

⁶⁵ Currently in Chile, a project is being carried out for the certification of day-care centers and kindergartens, in order to assure quality pre-school education standards to guide improvements in the management and service of pre-school education offered to the public sector. Certification corresponding to these standards will make it possible to increase the regulation of pre-school education services offered by the private sector, the quality of which the public has the least knowledge. Thus, the project seeks to certify the establishments in a transparent manner in order to assure quality and to foster improvements. The certification standards treat affective education, the quality of employees, safety, and a healthy environment.

⁶⁶ The latest report presented by the OECD (2003) on the education reform in Chile, one which has had a large investment of resources and that has retained continuity, notes that the results are not in proportion to the efforts made. The first recommendation of the report refers to the need to give priority to the training and quality of teachers.

2. Investing only in training vs. investing in the professional and human development of teachers

Professional development is based on permanent learning in order to strengthen the teaching task; that is, for teachers to possess the skills necessary for the exercise of their profession. Teacher policy should, therefore, integrate initial education, in—service training, salary policy (which includes salaries, stimuli, incentives in the context of rights and obligations), participation, teacher performance, opportunities for accountability, teacher health, social well-being, and cultural development.

The results of reforms and of various projects carried out within countries prove that education, in-service training, or professional enhancement alone (the terms vary by country) does not produce the desired impact. The skills necessary to exercise the profession and to assure that students learn and develop comprehensively cannot be reduced only to "instrumental skills". There are a number of elements that determine the way in which teachers learn, teach, create stimulating learning climates, generate educational environments in schools and classrooms, relate to their colleagues, to families, and communities, and fulfill education objectives.

3. Teacher development is not only a problem of ministries of education and of unions

The professional development of teachers is a shared social responsibility, given the diversity of components of which it is composed. This means overcoming the traditional idea that, just as education is a problem for educators, the teacher question is the exclusive preserve of departments of ministries, pedagogical institutes, and colleges of education (or unions, when it comes to salaries). Investing in the development of teachers involves dealing with policies and programs created cooperatively by ministries of education, the economy, health, social welfare, the family, housing, culture, and other involved parties. This is not a case of multiplying disparate programs, but rather one of creating consensus among all actors regarding a comprehensive proposal that, although having components carried out at different times, will together generate a visible impact on the quality of education and on student learning outcomes, which is one of the most important variables for measuring teacher performance.

4. Education reforms with the transformation of and investment in the initial training of teachers

Initial training is one of the most influential factors in teacher performance. It is contradictory, therefore, that in various countries, the reform of initial training has been absent from education and curricular reforms. The changes that have in fact occurred in this field have come from initiatives of training institutions themselves,⁶⁷ not always in joint cooperation, but interested remaining up-to-date. Among the changes made, one can recognize some common elements. One of these is the constant tendency to increase the number of years of training in order to improve its quality. The following table allows us to compare the duration of teacher training courses in Latin America and in OECD countries.

Table 11 shows great variety in the duration of courses between countries of the OECD and of Latin America. Of course, this is not only a problem of course duration, but rather of the quality of the training process—a subject that currently should be treated with urgency. Therefore, policies and resources are required in order to carry forward well-articulated programs for modernizing initial teacher training that, taking advantage of accumulated knowledge, the results of existing studies and of new research, and within the framework of an integrated professional development system, allows countries to make progress in one of the emerging themes of change in education.

⁶⁷ There are exceptions, such as the cases of Chile, Argentina, and Peru, where projects have begun that are linked to reform proposals, although the implementation of changes has not conclude or has not maintained continuity.

Table 12

**NUMBER OF YEARS OF POST-SECONDARY EDUCATION REQUIRED
FOR TEACHER CERTIFICATION, BY EDUCATION LEVEL, 1999**

Country	Years of training		
	Primary	Lower secondary	Higher secondary
Latin America			
Argentina	2.5	3.25	5
Brazil	3.5	4	4
Chile	4	4	5
Paraguay	3	4	3
Peru	5	5	5
Uruguay	3	4	4
OCDE			
Germany	5.5	6	6.5
Spain	3	6	6
France	5	5	5.5
Portugal	4.5	4.5	4.5
United Kingdom	4.5	4.5	4.5
Czech Republic	4.5	4.5	5

Source: Siniscalco, M. "A statistical profile of the teaching profession", ILO-UNESCO. 2002.

5. In-service training for current needs vs. training within an integrated professional development system

In the field of in-service training (also called "permanent education", "improvement" "training"), there are multiple concerns. Considerable resources have been invested within reforms, programs, or projects —many of them with foreign financing, payable and otherwise. The results are not encouraging; significant differences are not apparent in before and after comparisons. Among persisting problems are the following:

- Most countries do not have quality certification processes and mechanisms. Therefore, the most varied institutions may "train" future teachers. There is a need for more coordination, guidelines, coordination with national priorities in terms of major orientations, and synergy with in-service training professionals.
- In-service training, in many cases, has become a sum of disconnected events without assessment, follow-up, or technical assistance for teachers. Its impacts on classroom teaching practices and school life are unknown.
- Important experiences show the efforts made, or currently being carried out, to change the focus of traditional "teacher training" practices. Nevertheless, there are still a number of pending tasks. These begin with need to formulate openly discussed and agreed-upon basic policies. Such policies can aid in moving toward the creation, or strengthening, of national systems of qualified organizations and institutions that together can facilitate the interface between initial and in-service training and to create a system that guarantees life-long learning for teachers and that incorporates outstanding experiences in different countries.

6. The quality of life of teachers and recognition of the value of their profession influence student learning

Various local and national studies⁶⁸ portray teachers as a group with low self-esteem, who do not see themselves as valued by society, and that has suffered a continual decline in living standards and income. In most countries, teacher salaries are among the lowest among professionals with similar responsibilities. All of this has a negative impact on professional satisfaction, which is an important factor in teacher performance.

If traditionally, most teachers were part of the "middle-class", they are today below the poverty line. In general, their quality of life has been profoundly affected; even more so if one understands the concept not only in terms of salary, but as a set of factors that determine whether a person or a family lives according to basic levels of human development: access to culture, to science, to an adequate diet, to free time for recreation and for resting from work, access to preventive and curative health services, adequate housing, and, of course, income in accordance with their responsibilities.

Today, more than ever, there must be recognition of the urgent need to improve the quality of life of teachers, to attend to their cultural, scientific, and technological development through a set of comprehensive policies that guarantee to schools and communities high-quality teachers with strong professional identities, committed to learning results, open to continual learning and able to generate, coordinate, and direct the processes of local and national change that countries require. Although progress has been made in different areas, what is lacking is to integrate the concept of professional and human development with that of shared responsibility in order to bring together public and private actors into a national consensus for development of the teaching profession.

7. The work of teachers and its assessment: promotion through time in service, or through professional development?

The entry, permanence, and career promotion of teachers show clear characteristics that have an influence on the organization of work in education. Some common characteristics that stand out (Morduchowicz, 2002) are:

- The teaching career is organized in a pyramid fashion with a series of hierarchical posts that involve different functions.
- In order to be promoted, formal elements (credential, time in service) are more important than performance.
- Assessment systems do not function of objective bases; there are no real assessment indicators nor is there an assessment culture.
- Salary schedules are unconnected with what is done in the school.
- The scale pays the same for different efforts, aptitudes, and performance.
- The relative condition of immobility of the working post of teachers makes it difficult for them to respond to new educational demands. At the same time, this situation also illustrates the difficult working conditions of teachers which also negatively influences their attitudes.

Decentralization has led to great diversity in the focuses of the region in regard to the various areas of government that have authority over decisions that affect the teaching profession. Some

⁶⁸ Studies have been carried out in Argentina, Ecuador, and Peru on how teachers perceive themselves, how they think they are perceived by society, and the relation that these factors have on teacher self-esteem, performance, and job satisfaction.

decentralization processes have stopped half-way, superimposing different levels of government control over the profession. There are countries in the region in which municipal, state (provincial) and national authority is juxtaposed, thus duplicating costs and hindering the access of teaching teams within schools to assistance and guidance services.

It appears that the largest countries in the region (Argentina, Brazil, and Mexico), which are organized as federations, have chosen to decentralize these decisions, at least at the state level,⁶⁹ while the smaller countries, such as those in the Caribbean, in the Andes, and others, maintain decision-making at the central level. The exception seems to be in the case of salaries, which in all cases (except for Argentina and Brazil) are determined at the national level.

Professional career paths are determined in almost lineal fashion, according to years of service and the acquisition of academic diplomas. In general, there is not a system that provides incentives for teachers, that awards excellence, and that obliges those who do not fulfill their responsibilities to be accountable. Even salary increases are generally independent of work performed. In terms of assessment, mechanisms tend to be more formal than real. However, there are few examples of the functioning of assessment systems as such and which involve a variety of variables, seeking to assure the quality of education without imposing punishments. For these reasons, there is a lack of a culture of assessment, of accountability at all levels that links performance with salaries and stimuli of various kinds as a step toward social recognition of the importance of the profession.

All of this involves great challenges. Regulation mechanisms must be established that do not exist, with controls for quality and pertinence that make it possible to improve teacher performance. This is especially so when we consider that only in one-third of the countries of the region does teacher performance have an impact on promotions and salaries, and that in most, reports on teacher performance have no subsequent effect.

8. Salary increases vs. salary policy within a framework of new working conditions

In terms of purchasing power, teacher salaries in Latin America are low. Compared with current salary levels in the OECD countries, those in Latin America (in terms of maximum scale for primary, lower secondary, and upper secondary) are 37,0%, 43,8% y 34,9%, respectively. For the area, at the three levels, teachers in Peru and Uruguay are the lowest paid, while in Mexico they are the highest.⁷⁰

⁶⁹ Brazil is the exception as it has decentralized many of these processes down to the municipal level, particularly with respect to the teaching of lower grades. This strategy, however, has not yielded the results expected, above all in the case of small rural municipalities.

⁷⁰ For Latin America, data is only available for six countries.

Table 13

TEACHER SALARIES IN PUBLIC PRIMARY SCHOOLS. OECD COUNTRIES AND LATIN AMERICA, 2000*(In US\$ equivalents and as a percentage of per capita GDP)*

Country	Salary (in US\$ equivalents)			vs. GDP per capita (in %)		
	Beginning	With 15 years of experience	Maximum scale	Beginning	With 15 years of experience	Maximum scale
Average for moderately developed countries	12 822	17 657	25 562	1.1	1.4	2.0
Latin America	8 278	10 333	13 451	1.0	1.2	1.6
Argentina	9 027	12 545	14 897	0.7	1.0	1.2
Brazil	7 420	10 176	11 309	1.1	1.5	1.6
Chile	10 716	12 038	16 122	1.2	1.4	1.9
Mexico	11 235	14 824	24 536	1.2	1.6	2.6
Peru	5 523	5 523	5 523	1.2	1.2	1.2
Uruguay	5 749	6 891	8 317	0.7	0.8	1.0
Average for highly developed countries	23 804	32 452	36 316	0.9	1.3	1.4
Traditional European countries	24 506	32 833	39 452	1.0	1.3	1.6
Scandinavian countries	22 294	26 530	28 453	0.8	1.0	1.0
Asia- Pacific region	22 237	38 257	42 205	0.9	1.6	1.7
United States	27 631	40 072	48 782	0.8	1.1	1.4

Source: By the authors using data base in "Education at a Glance". OECD, and "Financing Education - Investments and Returns", OECD-UNESCO, 2002.

Table 14

TEACHER SALARIES IN PUBLIC LOWER SECONDARY SCHOOLS. OECD COUNTRIES AND LATIN AMERICA, 2000*(In US\$ equivalents and as a percentage of per capita GDP)*

Country	Salary (in US\$ equivalent)			vs. GDP per capita (in %)		
	Initial	With 15 years experience	Maximum scale	Initial	With 15 years experience	Maximum scale
Average for moderately developed countries	14 680	20 143	29 401	1.2	1.6	2.4
Latin America	10 914	13 430	17 538	1.3	1.6	2.0
Argentina	14 623	21 188	25 742	1.2	1.7	2.1
Brazil	14 820	16 240	18 723	2.2	2.4	2.7
Chile	10 716	12 038	16 122	1.2	1.4	1.9
Mexico	14 383	18 760	30 859	1.6	2.0	3.3
Peru	5 462	5 462	5 462	1.2	1.2	1.2
Uruguay	5 479	6 891	8 317	0.7	0.8	1.0
Average for highly developed countries	24 745	33 744	40 008	1.0	1.3	1.5
Traditional European countries	26 112	35 011	42 430	1.0	1.4	1.7
Scandinavian countries	22 741	27 232	29 449	0.8	1.0	1.1
Asia- Pacific region	22 323	38 262	42 210	0.9	1.6	1.7
United States	27 643	40 072	47 908	0.8	1.1	1.3

Source: By the author using data base in "Education at a Glance". OECD, and "Financing Education - Investments and Returns". OECD-UNESCO, 2002.

Table 15

**TEACHER SALARIES IN PUBLIC UPPER SECONDARY SCHOOLS.
OECD COUNTRIES AND LATIN AMERICA. 2000**
(In US\$ equivalents and as a percentage of per capita GDP)

Country	Salary (in US\$ equivalent)			vs. GDP per capita (in %)		
	Initial	With 15 years experience	Maximum scale	Initial	With 15 years experience	Maximum scale
Average for moderately-developed countries	14 732	20 030	28 414	1.3	1.6	2.2
Latin America	13 613	12 550	15 337	1.3	1.5	1.8
Argentina	14 623	21 188	25 742	1.2	1.7	2.1
Brazil	15 500	16 121	19 776	2.3	2.3	2.9
Chile	10 716	12 582	16 883	1.2	1.5	1.9
Mexico	s/d	s/d	s/d	s/d	s/d	s/d
Peru	5 462	5 462	5 462	1.2	1.2	1.2
Uruguay	6 257	7 398	8 824	0.7	0.8	1.0
Average for highly-developed countries	26 130	36 814	43 980	1.1	1.4	1.7
Traditional European countries	28 292	39 392	47 720	1.1	1.5	1.9
Scandinavian countries	23 366	29 727	33 314	0.9	1.1	1.2
Asia-Pacific region	22 323	38 270	42 758	0.9	1.6	1.7
United States	27 751	40 181	48 037	0.8	1.1	1.3

Source: By the authors using data base in "Education at a Glance". OECD, and "Financing Education - Investments and Returns". OECD-UNESCO, 2002.

The salary/GDP relation —the right-hand side of the above tables— is important because it indicates that the financial efforts made by Latin American countries at the three levels of education (primary, lower secondary, and upper secondary) are greater than those made by developed countries. On the average, in the six Latin American countries, teacher salaries exceed per capita GDP by 100%. Of the cases studied, Uruguay shows the lowest relation for the three levels of education, and does not exceed the figures for highly-developed countries. For its part, Mexico is the country that shows the highest values, given that its teacher salaries reach 3 times the GDP per capita. There are other analyses that come to different conclusions, because they measure payment per hour/month of class rather than monthly salaries. On the other hand, if one analyzes time outside the classroom and the school that teachers use to update their knowledge and teaching techniques, prepare classes, correct homework, and prepare tests, one might ask how long teachers' working days actually are.

Finally, in Latin American countries, teacher salaries are lower to those of other salaried professionals and technicians with comparable levels of training. Available figures show that teacher salaries are between 25% and 40% less than those of other salaried professionals.

9. Stimuli and incentives for teachers begin with a comprehensive policy

To date, discussions regarding incentives have been limited almost exclusively to economic issues. Experiences carried out in this area, almost all of which have occurred in the United States, are not very promising. Kemmerer⁷¹ presents a somewhat broader spectrum, as a result of research on teacher incentive policies in North America, Asia, and Oceania. Such incentives can be in the form of salary bonuses in regard to working conditions or other factors. For each of these incentives

⁷¹ Frances Kemmerer (1990).

there are a number of aspects to be explored in the region that could result in interesting policies and not always of high cost.

TEACHER INCENTIVES AIMED AT IMPROVING THE EFFECTIVENESS OF TEACHING

Payment		Working conditions	
Salary	Bonuses	Setting	Teacher training
* Initial	* For regular attendance	* School installations	* Conducting classes
* Salary scale	* For student performance	* Classroom	* Use of materials
* Regular payments	* Classroom projects grant	* Number of students	* Lesson preparation
* Merit		* Age range of students	* Application of tests
	Benefits	* Academic community	
Supplements	* Paid vacations		
* Receipt of materials	* Sick leave	Teaching support	<u>Career opportunities</u>
* Cost of living	* Maternity leave	* Teaching guides	* Master Teacher
* Unfavorable conditions	* Health insurance	* Computers for students	* Principal
* Transportation costs	* Medical assistance	* Class programing	* Supervisor
	* Pension	* Resource provision	Post-service training
Cash payments	* Life insurance		
* Housing subsidy or grant	* Additional employment	Supervision	
* Food subsidy or grant	* Additional teaching work	* Observation	
* Land for home construction	* Promotion exams	* Feedback	
* Special rate loans	* Editing of textbooks	* Coaching	
* Scholarships for children	* Development projects		
* Free books			

Source: Kennedy Kerry. "Enhancing the status of teachers in the Asia-Pacific region: An exploration of the issues", taken from F. Kemmerer, 1990).

10. Social conflict and the fragile governability of education systems

Every day, someplace in Latin America and the Caribbean, there are reports of at least one conflict within education systems. Of these, the large majority are related to the demands of teachers. During 2003, the region was affected by 325 days of teacher strikes that took place in various countries, including Guatemala, Peru, Chile, the Dominican Republic, Costa Rica, Ecuador, Bolivia, Uruguay, Brazil, Panama, Paraguay, and Honduras. The range of number of days lost due to national teacher work stoppages was from 2 days in Panama and Paraguay to 93 days in Ecuador. The region lost more than 6 billion dollars that year as a consequence of the time consumed by these strikes, probably affecting as well teaching and learning outcomes in those countries that had large periods of teacher labor conflicts.

Table 16

DAYS AND RESOURCES LOST DUE TO TEACHER WORK STOPPAGES

Country	Number of days of national strikes in 2003	Percentage of days not worked due to teacher work stoppages ^a	Resources lost due to teacher work stoppages ^b
Guatemala	52	29%	114 869 000
Peru	31	17%	319 209 000
Chile	4	NA	NA
Dominican Republic	4	2%	10 650 000
Costa Rica	41	21%	156 156 000
Ecuador	93	47%	182 736 000
Bolivia	31	14%	130 130 000
Uruguay	6	NA	NA
Brazil	55	29%	4 985 448 000
Panama	2	1%	7 257 000
Paraguay	2	NA	NA
Honduras	4	NA	NA

Sources: The World Bank: Data and Statistics.

At: <http://www.worldbank.org/data/countrydata/countrydata.html> El Banco Mundial: EdStats.

At: <http://devdata.worldbank.org/edstats/cd1.asp>. Panorama Educativo de las Américas. UNESCO, 2002.

^a Calculation method (1): "Days of national strikes during 2003" divided by the number of desirable teacher work days, based on the number of annual and weekly hours established in the official school calendars of countries. (Source: Education Panorama of the Americas. PRIE).

^b Calculation method (2): Calculates the volume of GDP (for 2002 in current US\$) for education, according to the percentage of GDP that the government spends on education (year 2000 statistics) in order to arrive at annual public spending on education. The result is multiplied by "the percentage of days not worked due to teacher strikes" in order to calculate the "annual spending lost due to teacher strikes" and arrive at the order of magnitude of the economic cost of unresolved teacher conflicts.

Conflict within education systems is not a minor problem. Nor is it a circumstantial situation determined by particular actors in particular countries. Rather, it is a highly important social phenomenon that involves a multitude of actors—not only teachers and ministers of education, and cannot be viewed in a linear and unilineal manner without considering society in general and education in particular, the role of teachers in educational change, and social responsibility, understood in its broadest sense.

The reasons for such conflict are many. Economic demands occupy a major position, while other emerging themes appear such as education budgets, the content and approach of education policies, job post allocation systems, teacher performance assessment, improvements in the situation of schools, among others. Without disregarding the particularities of each country and of each actor in confrontation, the absence of participation and of co-responsibility is a underlying common factor.

The low social and economic value granted to the teaching profession is joined by the fact that teachers continue to be viewed as passive executors of what is decided at higher levels, operating curricula and changes in which they have had no voice, presence, or ability to make decisions. All of these conditions (among which include the traditional forms of negotiation) create a climate adverse to cooperation and negotiation.

Conflict does not guarantee governability, understood as the set of requisites that are needed in order to direct and guarantee the functioning of a system in which changes and transformations can be carried out. Therefore, if one seriously wishes to progress in proposals for consensus, an

indispensable climate of agreement must be created to which all actors commit themselves within a framework of respect for individual rights and the fulfillment of professional and social duties.

11. Strengthening the active participation of teachers in order to improve student learning and to guarantee changes in education

Today, more than ever, there is a need to recapture the mandates of PRELAC, approved and signed by 44 countries, and which defines as its second strategic focus, that of "teachers and strengthening their active participation in education change so they may respond to the learning needs of their students".

Teachers must be seen as the subjects and designers of integrating education proposals and not as merely their executors; as reflective, autonomous, creative professionals committed to changes in education. The definition of policies that point toward changes in enhancing the professionalism of teachers involves changes at the system level that include school policies. They involve, therefore, changes in management policies, in the administration of the system, and in labor and social security policies.

Bibliography

- Aguerrondo, Inés (2003), “La gestión del sector educación en los 90. Algunas cuestiones para mejorar la eficacia educativa”, Santiago, Chile, unpublished.
- (1997), “¿Es posible lograr calidad en educación con menores costos?”, *Revista perspectivas*, vol. 27, No. 2, Paris, United Nations Educational, Scientific and Cultural Organization (UNESCO).
- ANEP (National Public Education Administration) (1998), *Evaluación de aprendizajes en tercer año de educación primaria*, Montevideo.
- Avalos, Beatrice and María Eugenia Nordenflycht (1999), *La formación de profesores. Perspectiva y experiencias*, Santiago, Chile, Aula XXI, Santillana.
- Brautigam, D. (2000), *Aid Dependence and Governance*, Stockholm, Almquist & Wicksell International.
- Bruneforth, Michael, Albert Motivans and Yanhong Zhang (2004), “Investing in the future: financing the expansion of educational opportunity in Latin America and the Caribbean”, *UIS Working Paper*, No. 1, Montreal, UNESCO Institute for Statistics.
- Brunner, José Joaquín (1999), “Cibercultura: la aldea global dividida” [on line] <http://www.geocities.com/brunner_cl/cibercult.html>
- Calcagno, Alfredo Eric (1997), “El financiamiento de la educación en América Latina”, *Revista iberoamericana de educación*, No. 14, Madrid, May-August.
- Carnoy, Martin (2002), “Are education reforms working in Latin America? A new look at understanding whether education is getting better”, *Working Paper*, Washington, D.C., Inter-American Development Bank (IDB).
- ECLAC (Economic Commission for Latin America and the Caribbean (2004), *A Decade of Social Development in Latin America, 1990-1999* (LC/G.2212-P), Santiago, Chile, March. United Nations publications, Sales No. E.03.II.G.143.

- ____ (2003), *Social Panorama of Latin America 2002-2003* (LC/G.2209-P/I), Santiago, Chile, August. United Nations publications, Sales No. E.03.II.G.185.
- ____ (2002), *Social Panorama of Latin America, 2001-2002*, (LC/G/2183-P), Santiago, Chile. United Nations publications, Sales No. E.02.II.G.65.
- ____ (2000a), *Equity, Development and Citizenship* (LC/G.2071(SES.28/3)), Santiago, Chile.
- ____ (2000b), *The Equity Gap: a Second Assessment* (LC/G.2096), Santiago, Chile, May.
- ____ (1996), *The Strategic Role of Secondary Education in Achieving Well-Being and Social Equity* (LC/G.1919), Santiago, Chile, April.
- ____ (1995), *Social Panorama of Latin America 1995* (LC/G.1886-P), Santiago, Chile. United Nations publications, Sales No. E.95.II.G.17.
- ECLAC/UNESCO/OREALC (Economic Commission for Latin America and the Caribbean/ United Nations Educational, Scientific and Cultural Organization/UNESCO Regional Office for Education in Latin America and the Caribbean) (1992), *Educación y conocimiento, eje de la transformación productiva con equidad*, Santiago, Chile.
- Cueto, Santiago and Walter Secada (eds.) (2004), *Mathematics Learning and Achievement in Quechua, Aymara and Spanish Boys and Girls in Bilingual and Spanish Schools in Puno, Peru, Report for the World Bank*, Washington, D.C.
- De Andraca, A.M. (coord.) (2003), *Buenas prácticas para mejorar la educación en América Latina*, Santiago, Chile, Partnership for Educational Revitalization in the Americas (PREAL)/Inter-American Research and Documentation Centre on Vocational Training (CINTERFOR).
- Delannoy, Françoise (1998), “Reformas en gestión educacional en los 90’s”, *LCSHD Paper Series* No. 21, Washington, D.C, World Bank.
- Di Gropello, Emanuela and Rossella Cominetti (comps.) (1998), *La descentralización de la educación y la salud: un análisis comparativo de la experiencia latinoamericana* (LC/L.1132/E), Santiago, Chile, Economic Commission for Latin America and the Caribbean (ECLAC).
- Filgueira, C. and E.L. Martínez (2001), “La reforma educativa en Uruguay: desafíos y tendencias”, Montevideo, Ministry of Education and Culture, unpublished.
- Galiani, S. and E. Schargrotsky (2002), “Evaluating the impact of school decentralization on educational quality”, *Economía: Journal of the Latin American and Caribbean Economic Association*, Washington, D.C., The Brookings Institution.
- García Aracil, Adela and Donald Winkler (2004), “Education and ethnicity in Ecuador”, unpublished.
- Gerstenfeld, Pascual and others (1995), “Variables, extrapedagógicas y equidad en la educación media: hogar, subjetividad y cultura escolar”, *Políticas sociales series*, No. 9 (LC/L.924-P/E), Santiago, Chile, Economic Commission for Latin America and the Caribbean (ECLAC), December.
- González, Pablo, Alejandra Mizala and Pilar Romaguera (2004), “Recursos diferenciados a la educación subvencionada en Chile”, *Serie de economía*, No. 150, Centre for Applied Economics, Department of Industrial Engineering, University of Chile, December.
- Harbison, R. and E. Hanushek (1992), *Educational Performance of the Poor: lessons from rural Northeast Brazil*, New York, World Bank/Oxford University Press.
- Hausmann Ricardo and Miguel Székely (1999), *América Latina frente a la desigualdad: progreso económico y social en América Latina*, BID. Informe 1998-99, Washington, D.C.
- IDB (Inter-American Development Bank) (2003), “Hacia visiones renovadas del financiamiento educativo en América Latina y el Caribe”, document presented at Special Summit of the Americas (Monterrey, 12-13 January 2004).
- James, Estelle (1991), “Private finance and management of education in developing countries: major policy and research issues”, *Issues and Methodologies in Educational Development*, No. 5, Paris, International Institute for Educational Planning (IIEP).
- Jiménez, Emanuel and Y. Sawada (1998), “Do community managed schools work? An evaluation of El Salvador’s EDUCO Program”, *World Bank Economic Review*, Washington, D.C., World Bank.
- Kemmerer, Frances (1990), “An integrated approach to primary teacher’s incentives”, *Improving educational quality: a global perspective*, D. Chapman and C. Carrier (eds.), New York, Greenwood Press.
- Kennedy, Kerry (1998), “Enhancing the status of teachers in the Asia-Pacific region: an exploration of the sigues”, *Asia-Pacific Journal of Teacher Education and Development*, Hong Kong, Hong Kong Institute of Education.
- King, Elizabeth and B. Ozler (1998), “What’s decentralization got to do with learning? The case of Nicaragua’s school autonomy reform”, *The World Bank Working Paper Series on Impact Evaluation of Education Reforms*, No. 9, Washington, D.C., World Bank .

- Knack, S. and A. Rahman (2003), "Donor fragmentation and bureaucratic quality in aid recipients", document presented at seventh annual conference of International Society for New Institutional Economics [on line] <<http://www.isnie.org/ISNIE03.htm>>
- Labarca, Guillermo (1996), *Inversión en la infancia: evidencias y argumentos para políticas efectivas*, Santiago, Chile, Economic Commission for Latin America and the Caribbean (ECLAC)/United Nations Children's Fund (UNICEF).
- LLECE (Laboratorio Latinoamericano de Evaluación de la Calidad de la Educación) (2002), "Qualitative Study of Schools with Outstanding Results in Seven Latin American Countries" [on line] <<http://www.unesco.cl/09.htm>>
- ____ (1998), "Primer estudio internacional comparativo", [on line] <<http://www.unesco.cl/09.htm>>
- Martín, Michaela (1999), "The role of the university in initial teacher training: trends, current problems and strategies for improvement", *Contributions*, No. 32, Paris, International Institute for Educational Planning (IIEP).
- McMeekin, R.W. (2004), "Administración de la cooperación internacional en materia de educación en los países de América Latina y el Caribe", Santiago, Chile, UNESCO Regional Office for Education in Latin America and the Caribbean (OREALC), United Nations Educational, Scientific and Cultural Organization (UNESCO), unpublished.
- ____ (1996), *Coordinación de la asistencia externa para la educación en América Latina y el Caribe*, Santiago, Chile, United Nations Educational, Scientific and Cultural Organization (UNESCO)/United Nations Children's Fund (UNICEF).
- Miller, Errol (2004), "Improving Equity and Delivering Quality Primary Education to Vulnerable Groups in Latin America and the Caribbean", UNESCO Regional Office for Education in Latin America and the Caribbean (OREALC), United Nations Educational, Scientific and Cultural Organization (UNESCO), unpublished.
- Mingat, Alain (1998), "Costo y financiamiento de la educación en economías asiáticas de alto rendimiento", *Financiamiento de la educación en América Latina*, Santiago, Chile, Partnership for Educational Revitalization in the Americas (PREAL)/United Nations Educational, Scientific and Cultural Organization (UNESCO).
- Ministerio de Educación Ciencia y Tecnología (2003), "Alternativas de conversión de deuda por programas sociales", Buenos Aires, septiembre, unpublished.
- ____ (1999), *Mejor educación para todos. Programas compensatorios 1993-1998*, Buenos Aires.
- Morduchowicz, Alejandro (2002), "Carreras, incentivo y estructuras salariales docentes", *Documento*, No. 23, Partnership for Educational Revitalization in the Americas (PREAL), May.
- Motivans, Albert (2004), "Public and private roles in the provision and funding of education in Latin America and the Caribbean", Montreal, UNESCO Institute for Statistics (UIS), unpublished.
- Muñoz Izquierdo, Carlos (2004), "Uso de información para mejorar la gestión, seguimiento e impacto de programas y políticas educacionales", Santiago, Chile, UNESCO Regional Office for Education in Latin America and the Caribbean (OREALC), United Nations Educational, Scientific and Cultural Organization (UNESCO), unpublished.
- OECD (Organisation for Economic Co-operation and Development) (2002), *Education Statistics and Indicators. Education at a Glance*, Paris.
- ____ (2001), *Knowledge and skills for life: first results from PISA 2000*, Paris.
- OECD/UNESCO (Organisation for Economic Co-operation and Development /United Nations Educational, Scientific and Cultural Organization) (2002), *Financing Education-Investments and Returns*.
- ____ (2001), "Teachers for tomorrow's schools", *Analysis of the World Education Indicators*, Paris.
- OECD/UIS (Organisation for Economic Co-operation and Development)/UNESCO Institute for Statistics) (2003), *Literary Skills for the World of Tomorrow: Further Results from PISA 2000*, Montreal.
- Oliveira, J. B.A. (1998), *A Pedagogia do Sucesso*, Belo Horizonte, Saraiva.
- Paes de Barros, Ricardo and Rosane Silva Pinto de Mendonça (1998), "The impact of three institutional innovations in Brazilian education", *Organization Matters: Agency Problems in Health and Education*, D. Savedoff (ed.), Washington, D.C., Inter-American Development Bank (IDB).
- PREAL (Partnership for Educational Revitalization in the Americas) (2001), "Responsabilidad por los resultados educativos", *PREAL Informe*, No. 9, Santiago, Chile.
- Sander, Benno (w/d), "Las nuevas tendencias en la gestión educativa: democracia y calidad", [on line] <<http://www.iacd.oas.org/La%20Educa%20123-125/sand.htm>>.
- Schiefelbein, E. and others (1999), *Cost-Effectiveness of Education Programmes to Reduce Child Labor*, Washington, D.C., World Bank/United Nations Children's Fund (UNICEF).

- Schiefelbein, E and P. Schiefelbein (2003), "From screening to improving quality: the case of Latin America", *Assessment in Education*, vol. 10, July.
- Siniscalco, María Teresa (2002), *A statistical profile of the teaching profesión*, Geneva/Paris, International Labour Organization (ILO)/United Nations Educational, Scientific and Cultural Organization (UNESCO).
- Stubrin, Florencia and Julián Gindin (w/d), "Conflictividad docente en América Latina. El laboratorio de políticas públicas", *documento de trabajo*, UNESCO Regional Office for Education in Latin America and the Caribbean (OREALC), United Nations Educational, Scientific and Cultural Organization (UNESCO).
- Uemura, Mitsue (1999), *Community Participation in Education: What do we know?*, Washington, D.C., World Bank .
- UNESCO (United Nations Educational, Scientific and Cultural Organization) (2003a), *Compendio mundial de la educación 2003. Comparación de las estadísticas de educación en el mundo*, Montreal, UNESCO Institute for Statistics (UIS).
- ____ (2003b), *Educación para Todos en América Latina: Un objetivo a nuestro alcance. Informe regional de monitoreo de EPT 2003*, Santiago, Chile, UNESCO Regional Office for Education in Latin America and the Caribbean (OREALC).
- ____ (2003c), "Educación: ¿quién paga?", *Boletín del sector educación de la UNESCO*, No. 5, April-June.
- UNESCO/OREALC (United Nations Educational, Scientific and Cultural Organization/UNESCO Regional Office for Education in Latin America and the Caribbean) (2002a), *Declaración de la Habana: modelo de acompañamiento-apoyo, monitoreo y evaluación- del Proyecto Regional de Educación para América Latina y el Caribe*, PREALC, Santiago, Chile, December.
- ____ (2002b), *Informe regional: panorama educativo de las Américas*. Santiago, Chile, Proyecto regional de indicadores educativos, Ministry of Education/UNESCO Regional Office for Education in Latin America and the Caribbean (OREALC).
- ____ (2001), *Balance de los 20 años del Proyecto principal de educación en América Latina y el Caribe*, Santiago, Chile.
- ____ (1996), "Proyecto principal de educación en América Latina y el Caribe", *Boletín*, No. 40, Santiago, Chile.
- Willms, Douglas J. (2000), *Standards of Care: Investments to Improve Children's Educational Outcomes in Latin America*, New Brunswick, Canadian Research Institute for Social Policy, University of New Brunswick.
- Willms, Douglas J. and Marie-Andree Somers (2001), "Family, classroom and school effects on children's educational outcomes in Latin America", *School Effectiveness and School Improvement*, vol. 12, No. 4.
- Winkler, Donald (2004), "Improving Educational Management and Outcomes Through Decentralization: the Latin American Experience", Santiago, Chile, UNESCO Regional Office for Education in Latin America and the Caribbean (OREALC), United Nations Educational, Scientific and Cultural Organization (UNESCO), unpublished.
- ____ (2003), *Strengthening Accountability in Public Education: The Challenge Facing Central America and Mexico*, Washington, D.C., Research Triangle Institute.
- ____ (1999), "Empowering municipalities or schools?", *Decentralizing the State*, Washington, D.C., World Bank .
- Wolff, Laurence and others (2002), *Primary Education in Latin America: The Unfinished Agenda*, Washington, D.C., Inter-American Development Bank (IDB).
- Wolf, Laurence and Claudio de Moura Castro (2001), "Public or private education for Latin America? That is the (false) question", *Sustainable Development Department Technical Paper Series*, No. EDU-119, Washington, D.C., Inter-American Development Bank (IDB).
- Wößmann, Ludger (2001), "Schooling resources, educational institutions, and student performance: the international evidence", *Kiel Working Paper*, No. 983, Kiel Institute of World Economics.
- World Bank (2003a), "Data and Statistics. Country Data" [database] [on line] <<http://www.worldbank.org/data/countrydata/countrydata.html>>.
- World Bank (2003b), *Global Development Finance 2003: Striving for Stability in Development Finance*, Washington, D.C.
- World Bank (2002), "Education-EdStats" [database] [on line] <<http://devdata.worldbank.org/edstats/cd1.asp>>

Appendix

Appendix 1

Methodological considerations regarding estimates of differences between countries and resources required for meeting the four proposed goals

A. Reducing differences between countries: The criterion of cost convergence

A key aspect that was considered in estimating the additional resources required in order to meet the goals proposed is the need to raise the quality and efficiency of educational services. In other words, increases in public spending needed for meeting the goals should not only consider the resources necessary to serve a much higher proportion of the population in the age groups in question —increases in coverage and from population growth; they should consider the additional resources needed in order to assure a better quality education. The latter, for its part, will aid in meeting the objectives with greater efficiency. For this reason, it was felt that a calculation based on current (observed) per student costs at each level is not adequate, since it would "freeze" a situation that has stagnated through the years precisely due to the lack of public resources, particularly in countries within which current spending and per-student investment are very low, or lower than the regional average. Maintaining these costs as fixed would mean sustaining through time the inequalities that currently exist between countries and to "adopt" quality levels not compatible with the goals.

For this reason, the estimates presented here were based on the strong assumption of a convergence of costs per capita among countries. With this, we sought to assure that in countries that are farthest from meeting the education goals, additional resources represent a proportionally higher fraction of the regional total, not only in terms of the greater effort that they must make to achieve the goals in the same time period (due to their lower net enrolment rates), but also because they require more spending per capita in education in order to close the gaps that separate them from minimal acceptable standards. This will involve significant increases in investment costs in new schools and large increases as well in current spending —most of which goes to salaries of teachers and administrative support personnel.

Through an examination of annual per-student cost per capita figures for the three levels of schooling, it was determined that an adequate convergence criterion lies in the fact that countries which since the year 2000 have had per capita costs lower than the regional average need to gradually increase them until they reach that average by 2015. In the case of primary education, for example, it was determined that countries with annual current per capita spending of less than US\$ 171 (nine of the total twenty-two countries considered) should increase this spending until reaching this figure by 2015. Ecuador, El Salvador, Guatemala, Haiti, and Honduras are the countries that have the lowest levels of per-student spending, with figures that vary between one-half and one-quarter of the regional average.⁷² By the year 2000, primary school net enrolment rates of all of these countries were very low in comparison to the regional average of 93%, except for Ecuador, which according to official figures had already practically attained universal coverage (see table 3 attached). This same assumption of cost convergence was adopted for estimating the additional resources required for

⁷² Unless stated to the contrary, cost per capita figures and total resources necessary to meet the goals are expressed in 1995 dollars.

attaining the goals of pre-school and secondary education. In the case of the literacy goal, a cost per beneficiary figure was used that is the same for all countries.

B. Assumptions adopted for the estimate

As with any cost estimate of this kind, it is possible to adopt different assumptions in regard to different factors that influence the final results only marginally, or very strongly. Naturally, it is possible to "simulate" the effect of adopting different assumptions (and combinations among them) regarding the magnitude of additional resources necessary to achieve the goals. It was thought best, however, to adopt -discretionally but not arbitrarily —a basic set of assumptions, and to consider the resulting figures as plausible or credible values the purpose of which is to give an idea of the over-all magnitude of resources required to achieve the four goals by 2015, and the effort that should be made by the public sector in each country, year-by-year, in order to remain in a "fulfillment trajectory". We present below the major assumptions or hypotheses used in the estimate:

(a) We utilize current per capita costs (corresponding to the year 2000) for the three levels of schooling (pre-primary, primary, and secondary). These costs correspond to spending of the public sector, and include current costs and investments. Given that the concern is to explore sources of financing for public spending for education, the spending of the private sector (of families) was not considered, even though in the fulfillment of the goals, the private supply (which is variable between countries) and its changes through time can play an important role.

(b) We adopt a hypothesis of convergence (see above) of these public costs per student for the three levels of schooling in order to close the gaps that currently exist in the region, bringing the spending that lower income per habitant and lower education indicator countries make to levels more compatible with the needs for higher quality education. This results in higher volumes of additional resources in the countries that must make a greater financial effort vis-à-vis their needs. In each of the levels of schooling (the first three goals, respectively), the criterion was the mean value of observed costs; this is the figure toward which countries with per-student public spending below the average should converge. It was assumed that the countries with spending above the mean will undertake additional spending with the same current per capita costs.

(c) We express all figures in 1995 dollars, uncorrected for international differences in the purchasing power of this currency. Estimates in dollars of parity purchasing power do not basically alter the relative magnitudes of resources between countries, and their absolute levels lose meaning when analyzing alternative sources of financing, since these values are expressed in current dollars.

(d) We adopt a hypothesis of moderate growth of the economies in order to analyze the requirements of public resources in the course of fulfilling the goals. To this effect, it was assumed that GDP will expand at an annual rate of 2.57%, which corresponds to the "historic" rate for the regional average during the 1990-2002 period.

(e) We assume that countries will progress "linearly" toward fulfillment of each one of the goals, and that current spending and investment, and, therefore, the needs for resources, will be distributed linearly as well until the year 2015. Nevertheless, this assumption, which is obviously an over-simplification —particularly in the case of investment expenditures such as school construction— does not influence the estimate of the global volumes of resources necessary in each country.

I L P E S



NACIONES UNIDAS

Serie

C E P A L

seminarios y conferencias

Issues published*

1. Hernán Santa Cruz Barceló: un homenaje en la CEPAL (LC/L.1369-P), N° de venta S.00.II.G.59 (US\$ 10,00), 2000. [www](#)
2. Encuentro latinoamericano y caribeño sobre las personas de edad (LC/L.1399-P), N° de venta S.00.II.G.88 (US\$ 10,00), 2000. [www](#)
3. La política fiscal en América Latina: una selección de temas y experiencias de fines y comienzos de siglo (LC/L.1456-P), N° de venta S.00.II.G.33 (US\$ 10,00), 2000. [www](#)
4. Cooperación internacional para el desarrollo rural en el Cono Sur - Informe del seminario regional - Santiago, Chile 14 y 15 de marzo de 2000 (LC/L.1486-P), N° de venta S.00.II.G.18 (US\$ 10,00), 2000. [www](#)
5. Política, derecho y administración de la seguridad de la biotecnología en América Latina y el Caribe (LC/L.1528-P), N° de venta S.01.II.G.73 (US\$ 10,00), 2001. [www](#)
6. Informe de la relatoría del seminario de alto nivel sobre las funciones básicas de la planificación y experiencias exitosas (LC/L.1501-P; LC/IP/L.186), N° de venta S.01.II.G. 42 (US\$ 10,00), 2001. [www](#)
7. Memorias del Seminario Internacional sobre bancos de programas y proyectos de inversión pública en América Latina (LC/L.1502-P; LC/IP/L.187), N° de venta S.01.II.G.48 (US\$ 10,00), 2001. [www](#)
8. Seminario de alto nivel sobre las funciones básicas de la planificación. Compendio de experiencias exitosas (LC/L.1544-P; LC/IP/L.189), N° de venta S.01.II.G.85 (US\$ 10,00), 2001. [www](#)
9. Desafíos e innovaciones en la gestión ambiental (LC/L.1548-P), N° de venta S.01.II.G.90 (US\$ 10,00), 2001. [www](#)
10. La inversión europea en la industria energética de América Latina (LC/L.1557-P), N° de venta S.01.II.G.102 (US\$ 10,00), 2001. [www](#)
11. Desarrollo Sostenible. Perspectivas de América Latina y el Caribe. Reunión consultiva regional sobre desarrollo sostenible en América Latina y el Caribe (LC/L.1613-P), N° de venta S.01.II.G.153 (US\$ 10,00), 2001. [www](#)
12. Las campañas mundiales de seguridad en la tenencia de la vivienda y por una mejor gobernabilidad urbana en América Latina y el Caribe (LC/L.1616-P), N° de venta S.01.II.G.156 (US\$ 10,00), 2001. [www](#)
13. Quinta Conferencia Interparlamentaria de Minería y Energía para América Latina (LC/L.1642-P), N° de venta S.01.II.G.180 (US\$ 10,00), 2001. [www](#)
14. Metodología estandarizada común para la medición de los gastos de defensa (LC/L.1624-P), N° de venta S.01.II.G.168 (US\$ 10,00), 2001. [www](#)
15. La migración internacional y el desarrollo en las Américas (LC/L.1632-P), N° de venta S.01.II.G.170 (US\$ 10,00), 2001. [www](#)
16. Taller Preparatorio de la Conferencia Anual de Ministros de Minería / Memorias Caracas, Eduardo Chaparro Avila (LC/L.1648-P), N° de venta S.01.II.G.184 (US\$ 10,00), 2001. [www](#)
17. Memorias del seminario internacional de ecoturismo: políticas locales para oportunidades globales, mayo de 2001, División de Medio Ambiente y Asentamientos Humanos y División de Desarrollo Productivo y Empresarial (LC/L.1645-P), N° de venta S.01.II.G.197 (US\$ 10,00), 2001. [www](#)
18. Seminario Internacional Sistemas nacionales de inversión pública en América Latina y el Caribe: balance de dos décadas. Compendio General, Santiago, Chile 5 y 6 de Noviembre de 2001 (LC/L.1700-P, LC/IP/L.198), N° de venta S.01.II.G.111 (US\$ 10,00), 2002. [www](#)
19. Informe de relatoría del seminario sobre Sistemas nacionales de inversión pública en América Latina y el Caribe: balance de dos décadas (LC/L.1698-P; LC/IP/L.197), N° de venta S.02.II.G.9 (US\$ 10,00), 2002. [www](#)
20. Informe del Seminario "Hacia la institucionalización del enfoque de género en las políticas económico-laborales en América Latina" (LC/L.1667-P), N° de venta S.01.II.G.201 (US\$ 10,00), 2001. [www](#)
21. Cuarto diálogo parlamentario Europa-América Latina para el desarrollo sustentable del sector energético (LC/L.1677-P), N° de venta S.01.II.G.211 (US\$ 10,00), 2001. [www](#)

22. América Latina y el Caribe hacia la Cumbre Mundial sobre el Desarrollo Sostenible, Conferencia Regional Preparatoria Rio de Janeiro, Brasil 23 y 24 de octubre 2001 (LC/L.1706-P), N° de venta S.02.II.G.14 (US\$ 10,00), 2001. [www](#)
23. Oportunidades del sector empresarial en el área del medio ambiente (LC/L.1719-P), N° de venta S.02.II.G.30 (US\$ 10,00), 2002. [www](#)
24. Informes nacionales sobre migración internacional en países de Centroamérica. Taller de capacitación para el análisis de información censal sobre migración internacional en América Central (LC/L.1764-P), N° de venta S.02.II.G.78 (US\$ 10,00), 2002. [www](#)
25. Ciencia y Tecnología para el Desarrollo Sostenible. Una perspectiva Latinoamericana y Caribeña (LC/L.1840-P), N° de venta S.03.II.G.5 (US\$ 10,00), 2003. [www](#)
26. Informe del cuarto taller de Gerentes de Organismos de Cuenca en América Latina y el Caribe (LC/L.1901-P), N° de venta S.03.II.G.62 (US\$ 10,00), 2003. [www](#)
27. La pobreza rural en América Latina: lecciones para una reorientación de las políticas (LC/L.1941-P), N° de venta S.03.II.G.100 (US\$ 15,00), 2003. [www](#)
28. Reglas macrofiscales, sostenibilidad y procedimientos presupuestarios (LC/L.1948-P), N° de venta S.03.II.G.106 (US\$ 15,00), 2003. [www](#)
29. Gestión pública por resultados y programación plurianual (LC/L.1949-P), N° de venta S.03.II.G.107 (US\$ 15,00), 2003. [www](#)
30. Redes de apoyo social de las personas mayores en América Latina y el Caribe (LC/L.1995-P), N° de venta S.03.II.G.157 (US\$ 15,00), 2003. [www](#)
31. Capital social: potencialidades analíticas y metodologías para la superación de la pobreza (LC/L.1949-P), N° de venta S.03.II.G.125 (US\$ 15,00), 2003. [www](#)
32. Una evaluación de los procesos de descentralización fiscal (LC/L.1991-P), N° de venta S.03.II.G.153 (US\$ 15,00), 2003. [www](#)
33. Derechos humanos y trata de personas en las Américas. Resumen y aspectos destacados de la conferencia hemisférica sobre migración internacional (LC/L.2012-P), N° de venta S.03.II.G.174 (US\$ 15,00), 2003. [www](#)
34. Informe de la reunión sobre temas críticos de la regulación de los servicios de agua potable y saneamiento en los países de la región (LC/L.2017-P), N° de venta S.03.II.G.178 (US\$ 15,00), 2003. [www](#)
35. Empleos e ingresos rurales no agrícolas en Argentina (LC/L.2069-P) N° de venta: S.04.II.G.12, (US\$ 15,00), 2003. . [www](#)
36. La fecundidad en América Latina: ¿transición o revolución? (Santiago de Chile, 9 al 11 de junio de 2003) (LC/L.2097-P) N° de venta: S.04.II.G.34 (US\$ 15,00), 2004. . [www](#)
37. Informe del seminario sobre banco de proyectos exitosos de DNP Colombia (LC/L.2116-P) N° de venta: S.04.II.G.49 (US\$ 15,00), 2004. . [www](#)
38. Caracterización de los síndromes de sostenibilidad del desarrollo. El caso de Argentina. LC/L2155-P. N° de venta :S.04.II.G.83 (US\$ 15,00), 2004. [www](#)
39. Los síndromes de sostenibilidad del desarrollo en América Latina. El caso de México. (LC/L2156-P). N° de venta: S.04.II.G.84, (US\$ 15,00), 2004. [www](#)
40. Revisiones de desempeño ambiental de la OECD. (Responsable: Carlos de Miguel). (LC/L.2175-P). N° de venta: S.04.II.G.102 (US\$ 10,00), agosto 2004. [www](#)
41. Síndromes de sostenibilidad ambiental del desarrollo en Colombia. José Jairo Escobar (LC/L.2202-P), N° de venta: S.04.II.G.127 (US\$ 10,00), octubre 2004. [www](#)
42. Cambio de las familias en el marco de las transformaciones globales: necesidad de políticas públicas eficaces, Irma Arriagada y Verónica Aranda, (LC/L.2030-P), N° de venta: S.04.II.G.150 (US\$ 10,00), diciembre 2004. [www](#)
43. Investin better in oder to invest more. Finance and management of education in Latin America and the Caribbean, Economic Commission for Latin America and the Caribbean (ECLAC) and United Nations Educational, Scientific and Cultural Organization (UNESCO), (LC/L.2246-P), Sales N°: E.05.II.G.4 (US\$ 10,00), January 2005. [www](#)

-
- Readers wishing to obtain the listed issues can do so by writing to: Distribution Unit, ECLAC, Casilla 179-D, Santiago, Chile, Fax (562) 210 2069, E-mail: publications@eclac.cl.

 These publications are also available on the Internet: <http://www.eclac.org/> and <http://www.cepal.org>

Name:
Activity:.....
Address:.....
Postal code, city, country:.....
Tel.: Fax: E.mail: