Summit of the Americas

Regional Education
Indicators Project

Regional Report

ACHIEVING THE EDUCATIONAL GOALS

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ACHIEVING THE EDUCATIONAL GOALS

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PREFACE

The goals set by the Summit of the Americas in the area of education speak to central concerns that are linked both with guaranteeing the fundamental human rights of all people and with investing in the harmonious and equitable development of our countries.

The Regional Education Indicators Project, PRIE, is an initiative that came out of the Second Summit of the Americas, at which Heads of State identified education as the first priority of the region. The work carried out by the project has aimed at constructing regional comparable indicators, with the objective of contributing to the definition of more effective education policies.

In this sense, the publication Educational Panorama of the Americas (2002) was an effort to view the hemisphere from a comparative educational perspective. It shows that the progress achieved in education has occurred in a very unequal manner, and that there are important gaps to be overcome, both within and among countries.

It is therefore extremely important to be aware of the progress of countries in regard to the goals, as well as to have insights into the impact of the development of education on people and on communities in order to understand the future challenges facing public education policies.

In this closing phase of the first three years of this project, we present a new publication that focuses on illustrating the progress in the hemisphere in achieving the education goals of the Summit of the Americas. It also considers the need for such progress in terms of the impacts that education has on the lives of people, families, and communities.

This publication coincides in time both with the conclusion of the Regional Education Indicators Project within the framework of which it has been developed, and with the Third Meeting of Ministers of Education to be held in Mexico City from August 11-13 of this year. In this sense, we are confident that it will provide new elements for the consideration of the ministers of the hemisphere at their meeting, as well as for all of those who are interested in the challenges of education, the development of our countries, and in the region as a whole.

Finally, we hope that the efforts carried out will continue through time, so that we may have information, indicators, and analyses that make it possible to track the state of education in our countries in regard to the goals of the Summit, and other international commitments.

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INTRODUCTION

At the Second Summit of the Americas (Chile, April, 1998), the Heads of State and of Government adopted an Action Plan for Education for the region. This plan contained the following general goals: to assure that by the year 2010, 100% of young people would complete quality primary education, and that at least 75% of young people would have access to quality secondary education, with increasingly higher percentages of young people completing their secondary school studies; and that there would be increasing opportunities for life-long education for the population in general.

During the meeting of Ministers of Education of the countries attending the Second Summit of the Americas, held in Brasilia (July, 1998), it was agreed that the Ministry of Education of Chile, in collaboration with UNESCO, would coordinate the design and execution of a regional education indicators project. The purpose was for the project to contribute to follow-up and assessment of fulfillment of the objectives of the Plan of Action in Education for the region.

Interested countries from the entire hemisphere met in August, 2000 in Washington, DC. At that time, Chile presented the content and methodology of the work of PRIE. Thus begining its implementation as a three-year project.

Project execution coincided with publication of Education Panorama of the Americas, a document that presented an overview of education in the hemisphere, based on available indicators. Execution of the Project has made it possible to move forward in the interpretation of available education indicators, as well as in proposing new indicators that will allow us to better verify both the progress of countries in achieving the goals of the Summit of the Americas, and the impacts of education on the lives of communities, individuals, and families.

This publication brings together both new perspectives of available education indicators in light of the goals of the Summit of the Americas, and considerations of the social impacts of education.

We here analyze fulfillment of the education goals of the Summit of the Americas, utilizing the most recent information and indicators published by the UNESCO Institute of Statistics and other sources. In addition, we offer thoughts on the social impact of education based on experiences of the Project.

This volume is organized in the following manner: a first chapter summarizes the education goals of the Summit of the Americas, specifying their scope and meaning. It also uses available information in order to illustrate countries' progress in terms of the Summit goals, including methodological comments on the capacity and pertinence of existing indicators for the development of such an assessment. The second chapter presents thoughts on the social impacts of education, and illustrates some of these impacts using available information from the region. Finally, we present a set of conclusions and an appendix with information used in this publication.

We believe that this volume provides relevant information for those involved in decision-making regarding the formulation, execution, and assessment of education policies. After all, this is always the purpose and meaning of statistical information; that it be valuable for improving the living conditions of people.

chapter 1

THE SITUATION REGARDING THE EDUCATION GOALS OF THE SUMMIT OF THE AMERICAS

At the Second Summit of the Americas (Chile, April, 1998), the Heads of State and of Government adopted an Education Action Plan. This plan set as general objectives for the region that by the year 2010:

1. 100% of young people would complete quality primary education courses;

2. At least 75% of young people would have access to quality secondary education, with increasing higher percentages of young people finishing secondary school;

3. Life-long education opportunities for the general population.

This chapter seeks to specify the scope and meaning of these goals, as well as to present the situation in the region in their regard.[1]

[1] Note that in all cases, we only present information available to the sources used. Therefore, not all tables and analyses correspond to the same sets of countries. For details on the information used, see the data appendix.

A. FIRST GOAL:

UNIVERSAL COMPLETION OF QUALITY PRIMARY EDUCATION

DEFINITIONS

Education is considered to be a fundamental human right.[2] In this sense, presenting goals regarding assurance of access to and achievement of particular levels of education has, as a basis, the recognition of this attribute of education. It is also associated with both the individual and collective benefits that education provides in terms of improving opportunities and of increasing the well-being of individuals and groups.

There is also a clear recognition of the fundamental role that basic education plays in terms of providing opportunities for the development of increased learning during the lives of individuals. In effect, the achievement of minimal levels of skills in reading, writing, and mathematics is a minimum, indispensable requisite for access to greater opportunities for all people. The need to assure at least the kind of training that covers basic learning needs for all people is a growing imperative that is increasingly recognized and accepted by all governments.[3]

It may be noted that, during recent decades the region has experienced significant growth in the levels of access to primary education. In effect, primary schools today do not provide services exclusively in urban centers, and serve a large percentage of the population of the Americas.

Nevertheless, there is general concern regarding progress in extending these service, and that advances in access to primary schooling be accompanied by the assurance of universal completion of studies at this level. In fact, what we see are high levels of drop out that are generally associated with the economic difficulties of families. These result in pressures for early entry into the labor market. Drop out is also associated with the failure of education systems to assure that children have learning opportunities that allow them to successfully move through the education system.

Significant growth in levels of access have taken place within a context of high demographic growth. This has resulted in high increases in school enrollments. Thus, current education systems in the region have achieved significant progress in guaranteeing access to primary education, although not assuring universal completion of this level. They have also been faced with the need, resulting from increased access, of serving underprivileged social groups whose education requires greater efforts.

This situation has seriously compromised fulfillment of the role of education systems as creators or facilitators of equal opportunities. Current challenges to education systems in the region, at least in regard to primary education, are no longer associated only with guaranteeing access; they are increasingly faced with the need to assure completion and the quality of services they offer.

These are the general principles and specific conditions of the region that underlie creation of the goal of assuring that within the next 7 years, 100% of children will not only access, but also finish primary education, and that such services will be of a level of quality which truly translate into greater and better opportunities.

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2 Article 26, Universal Declaration of Human Rights, 1948.

3 The Declaration of the Ministers of Education of Latin America and the Caribbean in 1979 (Mexico City), launching the Major Project of Education (UNESCO, 2000). Overview of the 20 Years of the Major Project of Education in Latin America and the Caribbean. Similarly, the International Conference on Education For All, held in 1990 in Jomtien, Thailand (World Conference on Education For All, 1990). Satisfying Basic Learning Needs: a view for the 1990s. moved forward in the same direction, and was ratified at the World Conference of Dakar in the year 2000 (World Education Forum, 2000) Framework of Action of Dakar.

In order to determine in what conditions the hemisphere finds itself in regard to this goal, it is necessary to make some initial statements that define operationally how one must proceed in order to assess the situation.

First, it is necessary to define the meaning of "primary education". Not all national education systems use such a term, and when they do, they do not all necessarily refer to the same thing. For example, Argentina provides a "basic" education of 9 years, while Bolivia has 8 years of "primary" education. This makes it necessary to specify what one understands by the term primary education in order to refer to phenomena that are substantially common among countries, independently of national nomenclature.

Primary education is usually identified as the first cycle or stage of the learning of the basic rudiments of reading, writing, and mathematics. With this in mind, and in order to make national education systems that have their own nomenclatures comparable, UNESCO created the International Standardized Education Classification. In its 1997 revision (ISCED 97), it designates the education programs that have these objectives (and other additional classification criteria) as corresponding to Level 1 of primary education.

All of the countries in the region have adapted their national systems to ISCED 97 and have thus identified what, in terms of substantive content, corresponds to ISCED 1. For example, Argentina considers as ISCED 1 the first 6 years of its basic education. Bolivia considers ISCED 1 to be the first 6 years of its primary education.

Thus, this report understands as the completion of primary education the end of the number of years of education equivalent to the number of grades or cycles that each country considers to correspond to level 1 of ISCED 97.

Moreover, the goal refers to the need to assure that all children conclude primary education. That is, one should see to it that all those between 0 and 18 years of age should conclude primary education. This definition creates an operational problem, since a significant portion of this group of people, given their age at a given time, have not had the opportunity to finish such studies, whether because they have not been able to begin such study, or because they are at some intermediate grade level.

Thus, the assessment should refer to the probability of finishing studies on the part of this population, given the observation of the current operation of education systems. In this sense, one should look at, within the population that has had the opportunity given its age, to finish their studies, if the education systems guarantee universal completion.

Moreover, achievement of this goal relegates the situation of the adult population in regard to access to primary education to be the subject of other specific actions and concerns.

The goal also refers to the quality of primary education. That is, not only is it considered necessary that all children have access to and finish primary education; the quality of such education is fundamental for the impact of this experience to be relevant in the lives of these people, and to contribute to the creation to equality of opportunities.

But "education quality" is a complex and multi-faceted phenomenon. Therefore, as we shall see later,[4] it needs to be viewed from a number of perspectives. From the pedagogical perspective, it is important that there is efficiency in fulfillment of curricula. From the cultural perspective, it is necessary that curricular content be based upon the conditions, possibilities, and aspirations of different populations toward which the content is directed. From a social point of view, education has quality when it contributes to equity through the generation of equality of opportunities. Finally, in economic terms, quality refers to efficiency in the use of resources.[5]

In order to approach the issue of the quality of education, UNESCO, just as the OECD, uses the input-process-outcome paradigm, in which quality of education is defined in regard to the human and material resources that are invested. Similarly, in regard to what takes place in schools and in classrooms – that is the processes of teaching and learning, curricula, expectations in regard to the learning of children, etc. Thus, quality may be defined by looking at education outcomes represented by student performance.[6]

In spite of this complexity regarding the quality of education, throughout the last two decades, the region has witnessed growing development, both on the national and international scales, of systems directed at assessing quality which have emphasized student academic achievement. In the region, these achievement levels are assessed, either in function of what the respective curricula consider should be achieved by a given grade or cycle of study, or in function of what, according to other constructions, one considers to be basic skills that society should assure for individuals so they may better confront the demands of a knowledge society. The first focus corresponds to studies such as that of the Latin American Laboratory for Assessment of the Quality of Education.[7] The second focus corresponds to studies such as Program for International Student Assessment (PISA), which recently has issued a new publication.[8]

Although academic achievement is only one aspect of the complex concept of quality, it is one that is central for education systems because it is related to the primary objective of these systems: to assure learning levels that translate into better opportunities for people. Thus, it is an area that has progressed to the point of providing internationally comparable information.

For the analysis of this first goal of the Summit of the Americas, we will make use of information from the first study of LLECE, which considers academic achievement in key subjects (language and mathematics) in the 3rd and 4th grades of primary education.

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4 See the section, "Analytic Model" in Chapter 2. This is based on Carlos Muñoz Izquierdo et.al. (2003) Desarrollo de una propuesta de indicadores del impacto social de la educación en América Latina y el Caribe, a study carried out by Universidad Iberoamericana de México under the direction of Carlos Muñoz Izquierdo. This study was developed at the request of PRIE, and is available at http://www.prie.cl

5 Carlos Muñoz Izquierdo et.al. (2002) Desarrollo de una propuesta de indicadores del impacto social de la educación en América Latina y el Caribe

6 EFA (2002) Is the World on Track? Global Monitoring Report 2002, p. 80

7 Hereafter denominated LLECE. The results of the first study may be found in Latin American Laboratory for Assessment of the Quality of Education: First International Comparative Study. UNESCO (2000); Latin American Laboratory for Assessment of the Quality of Education: First International Comparative Study, Second Report (UNESCO, 2001); Latin American Laboratory for Assessment of the Quality of Education: Technical Report (UNESCO, 2002); Latin American Laboratory for Assessment of the Quality of Education. Qualitative Study of Schools with Outstanding Outcomes in Seven Latin American Countries. All of these documents are available at http://www.unesco.cl

8 See UNESCO/OECD (2003) Literacy Skills for the World of Tomorrow – Further Results from PISA 2000.

THE CURRENT SITUATION

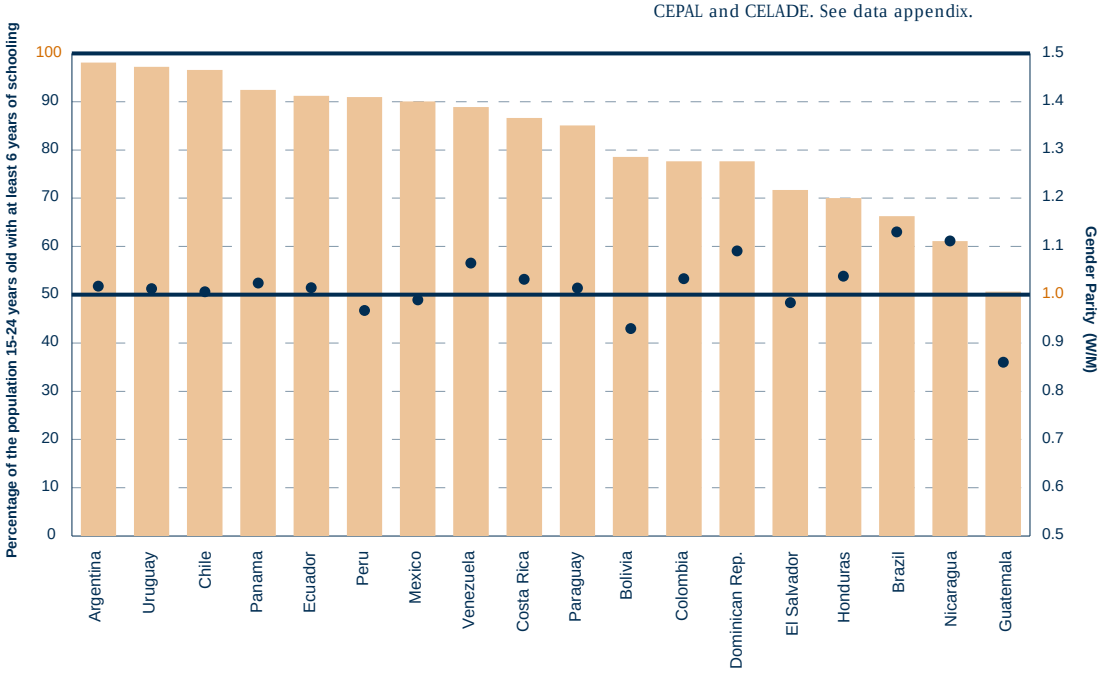
In order to directly approach the completion of these studies, it is possible to consider information on the educational profile of the population which has had the opportunity, given its age, to complete primary education.

Available information allows us to observe the proportion of people between 15 and 24 years of age who have completed at least 6 years of education (see Figure 1).[9]

FIGURE 1

PERCENTAGE OF THE POPULATION 15-24 YEARS OF AGE WITH AT LEAST 6 YEARS OF SCHOOLING (CIRCA 2000)

Source: Developed by PRIE using data from CEPAL and CELADE. See data appendix.



As can be seen here, in Argentina, Uruguay, Chile, Panama, Ecuador, Peru, and Mexico, more than 90% of young people have at least 6 years of education. Thus, these are the countries that are closest to achieving this goal. For their part, Brazil, Guatemala, and Nicaragua are the countries furthest from the goal, since in these three cases, less than 70% of the population in question are at this level.

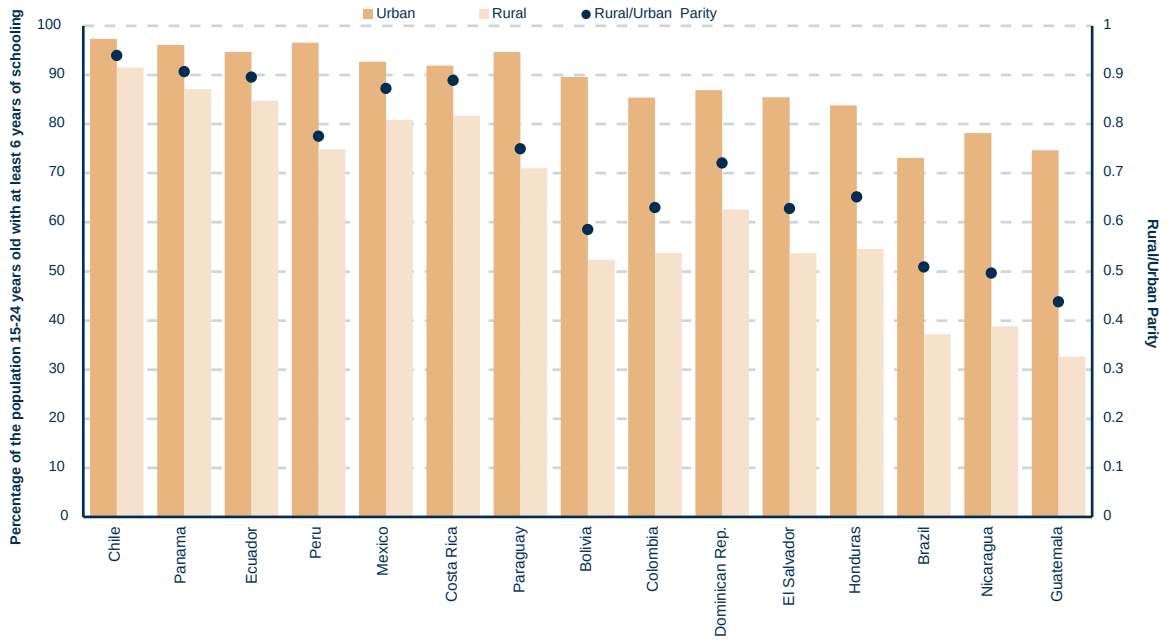
In the seven countries identified as closest to the goal, there are no marked differences associated with gender. Both males and females have the same probability of finishing primary education. In the other cases, except for Paraguay and El Salvador, we note differences between males and females that are generally favorable to the latter, except in the cases of Bolivia and Guatemala.

When we consider the information corresponding to this same indicator (population 15 to 24 years of age with at least 6 years of education) by area of residence (Figure 2) we see that urban areas tend to be closer to the goal. Only in three countries (Brazil, Nicaragua, and Guatemala) the values are under 80%, while in rural areas only Chile presents a value above 90%. The majority of the countries show percentages of less than 70%.

[9] Data sources utilized make it necessary to use this age range and this number of years of education. In regard to the PRIE proposal to measure the universal completion of primary school studies, see the methodological note in this chapter and in the chapter on the indicator component of the PRIE overview (PRIE 2003a). Note that Brazil has modified its adaptation of ISCED 97, considering that its primary education (ISCED 1) comprises only 4 years of education, while the other countries for which we have information consider this category to comprise 6 years, except for Colombia (5 years).

FIGURE 2 PERCENTAGE OF THE POPULATION 15-24 YEARS OF AGE WITH LESS THAN 6 YEARS DE SCHOOLING BY RESIDENCE (CIRCA 2000)

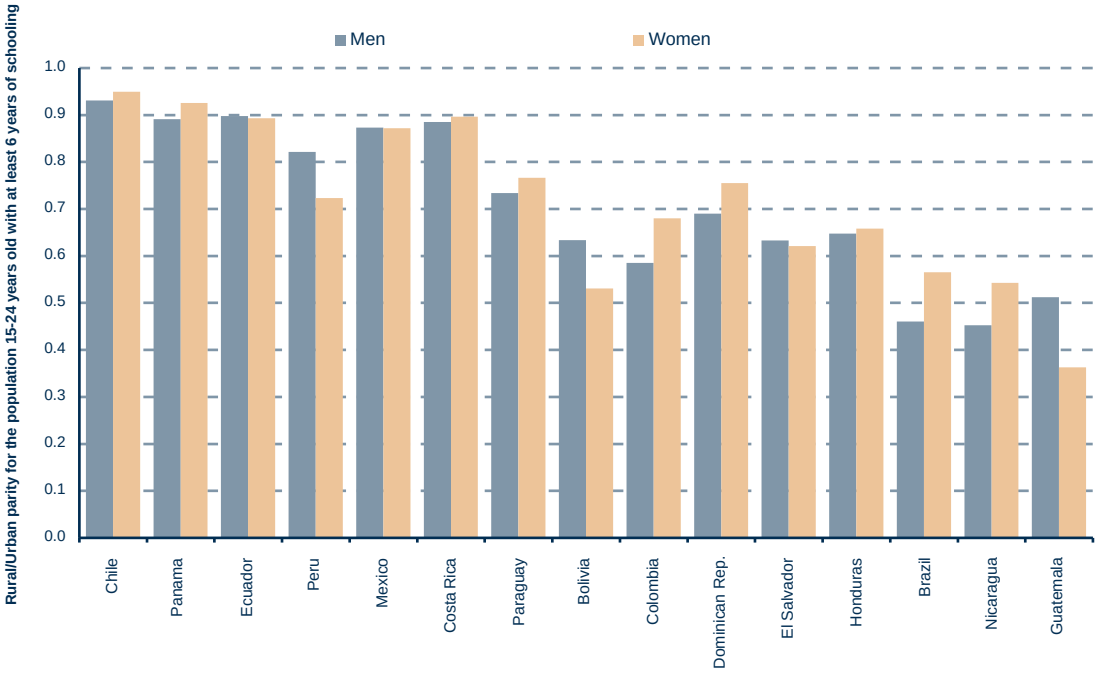
Source: Developed by PRIE using data from CEPAL and CELADE. See data appendix.



It is notable that the gap between urban and rural areas is also the most marked among the countries that are farthest from the goal. In effect, in countries such as Brazil, Nicaragua, and Guatemala, the proportion of young people who have less than 6 years of education in urban areas duplicates that observed in rural areas.

FIGURE 3 RURAL/URBAN PARITY[10] BY GENDER FOR THE POPULATION 15-24 YEARS OF AGE WITH AT LEAST 6 YEARS OF SCHOOLING (CIRCA 2000)

Source: Developed by PRIE using data from CEPAL and CELADE. See data appendix.



10 Parity rates used in this report relate the values observed of an indicator for two populations. Thus, if the parity rate is equal to 1, this indicates that both values are equal. Differences in regard to value indicate that the indicator is greater for one of the populations. In the case of gender parity, the value of the indicator for the female population is the numerator. Therefore, if the parity rate is larger than 1, this indicates that the indicator has an observed value greater in the case of females; if it is lower than 1, it indicates the contrary.

Also notable is the inexistence of a pattern associated with gender when we observe the differences between urban and rural areas (Figure 3). In effect, countries such as Chile, Mexico, Costa Rica, El Salvador, and Honduras show that the differences associated with gender and with residence do not mutually reinforce each other. For their part, in Peru, Bolivia, and Guatemala, the adverse conditions associated with rural residence have a greater impact on females than on males in terms of level of schooling achieved. In Panama, Paraguay, Colombia, the Dominican Republic, Brazil, and Nicaragua, education disparities in rural areas are greater in the case of males.

FIGURE 4

PERCENTAGE OF THE POPULATION 15-24 YEARS OF AGE WITH AT LEAST 6 YEARS OF SCHOOLING (CIRCA 2000) AND LEVEL OF URBANIZATION

Source: Developed by PRIE using data from CEPAL and CELADE. See data appendix.

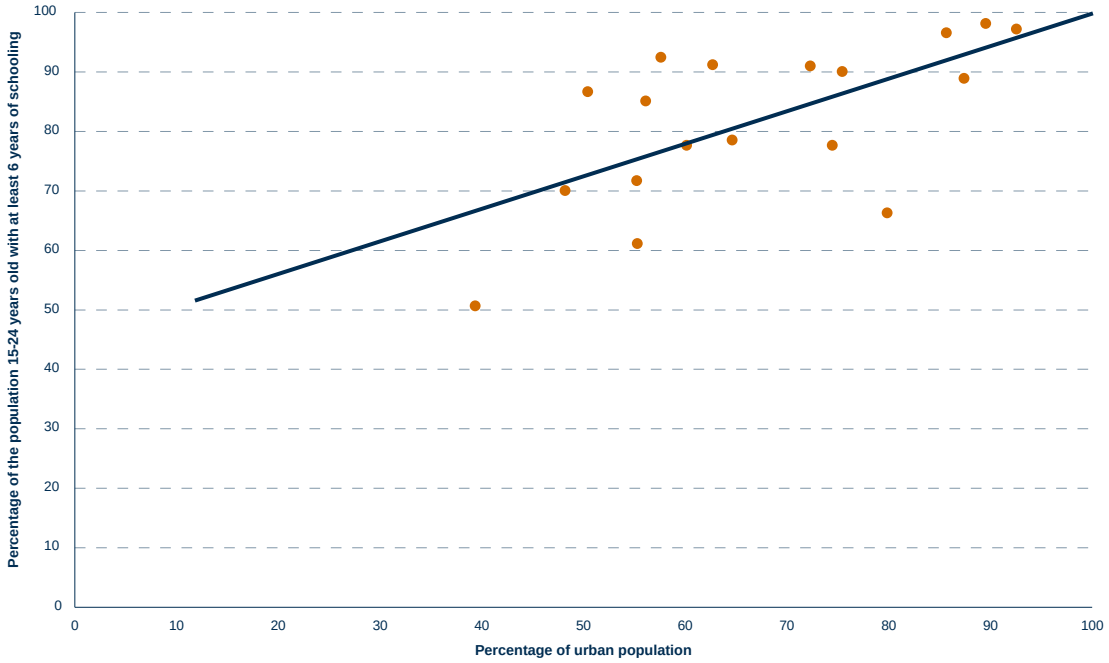


Figure 4 shows the relationship between the level of completion of primary schooling and the degree of urbanization of the country.[11] There is a relationship between both phenomena. Therefore, it is possible to observe greater levels of completion in countries with a greater proportion of their populations living in urban areas. However, this relation is not conclusive, and it is possible to observe that half of the countries achieve primary school completion rates greater than would be expected, given this association.

ASPECTS TO BE CONSIDERED

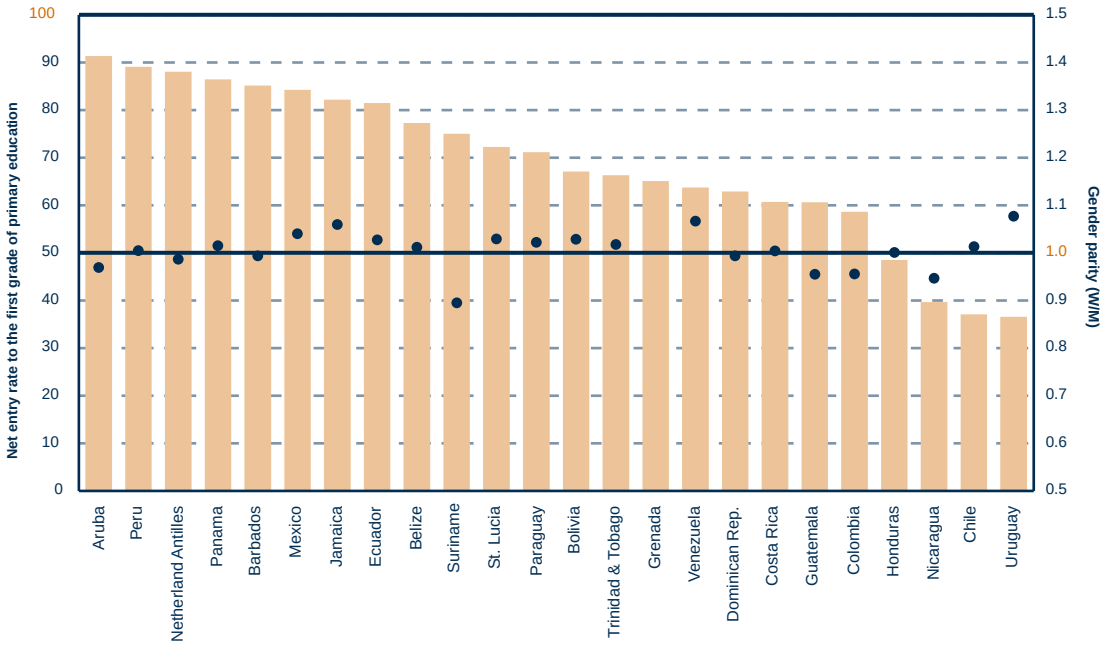
This section contains an analysis based on information on the current performance of education systems. Information on school completion (years of schooling of the population from 15 to 24 years of age) refers to results during the recent past of the systems. This temporal gap should be taken into account in analyzing the situation in order to consider processes in progress for improving education system performance and, therefore, the need to assure that these processes have sufficient scope and depth in order to assure fulfillment of the goals in the next 7 years.

Universal completion of primary schooling depends, first of all, on the level of access to the education system. This may be measured by the net entry rate to first grade and by the net enrollment rate.

[11] Information on the percentage of the urban population for Caribbean countries has not been considered in the analysis. This is because, given the demographic characteristics of these countries, this information cannot be treated in regard to problems of geographic dispersion and difficulties of access to educational services as in the cases of the rest of the countries.

FIGURE 5 NET ENTRY RATE TO THE FIRST GRADE OF PRIMARY EDUCATION AND GENDER PARITY (SCHOOL YEAR BEGININING IN 2000)

Source: UIS. Seed data appendix



The net entry rate to the first grade of primary education measures access to the education system; that is, the effectiveness of the incorporation mechanism. This measures the number of children of the official entry age for the first grade that actually enter that grade. Therefore, a rate equal to 100% means that all children of the official age to enter the first grade of education in fact do so.

Figure 5 shows the net entry rate to the first grade of education, as well as the gender parity rate for that indicator.[12]

The rate varies between 36.6% for Uruguay to 91.4% for Aruba. It should be noted that in some countries, the net rate reflects cultural factors or rigidity in the rules regarding entry age to the system more than it does problems of access. For example, in Chile, the official school entry age is 6 years; however, most children do so at 7 years of age, and for this reason the net entry rate is reduced.

In general, the Caribbean countries present higher net entry rates than the Latin American countries. This may be explained considering that in education systems based on the British model, the organization of grades corresponds more directly to the ages of students. In addition, the territorial scale of Caribbean countries does not present the difficulties of access to educational services that characterize disperse Latin American rural populations where, in some cases, schools are at distances that make it difficult for smaller children to travel.

In the entire region, only Aruba (91.4%) has a rate above 90%. Some countries present lower rates than those recorded in 1998, such as the case of Aruba, Netherlands Antilles, Barbados, Ecuador, Belize, Santa Lucia, Trinidad and Tobago, Chile, and Uruguay.

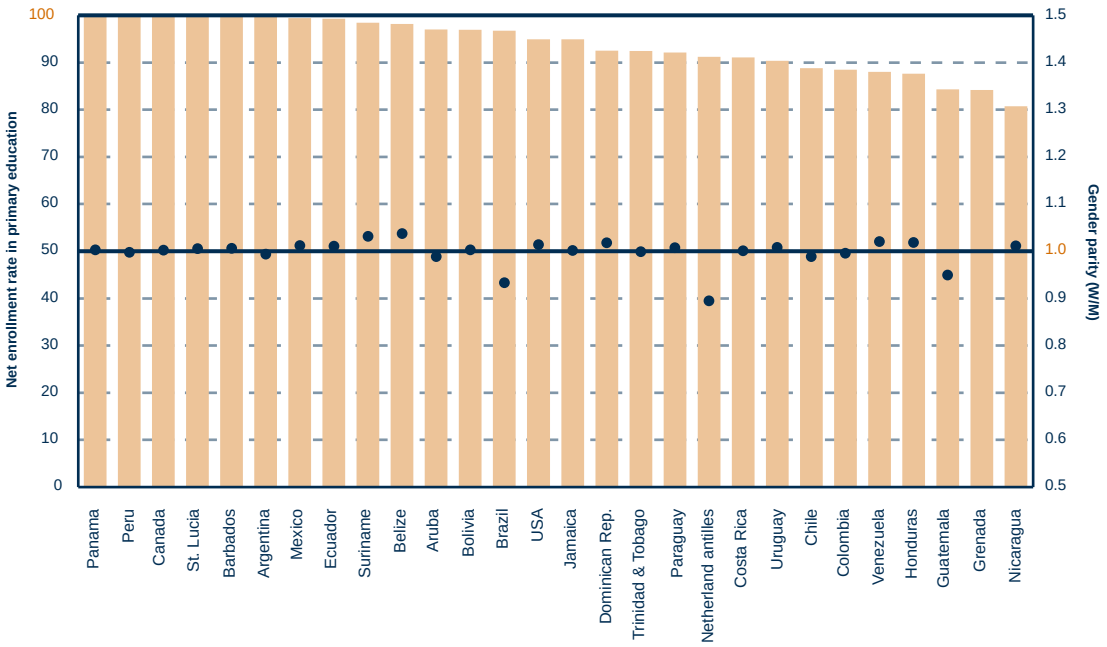
In order to measure gender equity, we have used the parity rate between entry rates of girls and boys. As shown in the right hand column of Figure 5, the difference in most countries is slightly in favor of girls. This means that, in most countries, girls enter the first grade of primary education in a more timely manner than do boys.

[12] Participating countries at the Summit of the Americas which are not included in the table did not have data available in the sources used.

NET ENROLLMENT RATE IN PRIMARY EDUCATION AND GENDER PARITY
(SCHOOL YEAR BEGINNING IN 2000)

FIGURE 6

Source: UIS. See data appendix.



The net enrollment rate in primary education indicates the degree of coverage[13] at this level. This relates the number of children enrolled in the range of official ages with the population of the same age. This is used as an indicator of universal access to primary education, since a net rate of 100% means that all children of the official age to be in the primary level are enrolled in this level. However, they may not be studying in the grade that corresponds to their ages, given that the problem of age-grade gap is particularly relevant in the region.

Although the primary school level is that in which countries have invested the most effort and which, in general, presents enrollment rates above 90%, in most countries in the region not all children of the age to be in primary school are enrolled.

Panama, Peru, Canada, Santa Lucia, Barbados, Argentina, Mexico, Ecuador, Surinam, Belize, Aruba, Bolivia, and Brazil show net enrollment rates of above 90%.[14] On the other hand, Nicaragua has nearly 10% of its children of the age to be in primary school not enrolled in schools at this level.

If we compare this information with that recorded for the 1998 school year, we see that countries have improved access to primary education. However, Argentina, Mexico, Belize, Aruba, Bolivia, Trinidad and Tobago, Netherlands Antilles, and Granada present indicators with values less than those recorded for that year. Furthermore, Nicaragua shows a slight improvement compared to 1998, a year in which it was above only Guatemala which, for its part, has increased the value of this indicator by nearly 8%.

From the perspective of gender equity, just as in the case for net entry rates to the first grade, enrollment in primary school is quite equal in most countries in the region.

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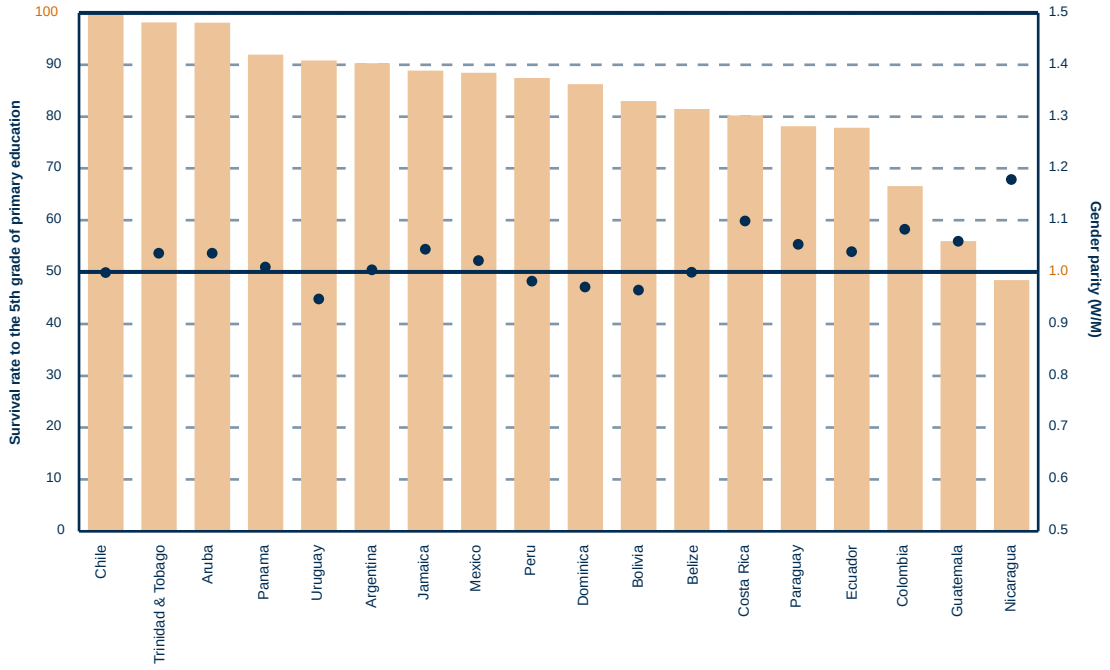
13 In order to measure coverage or the service that an education system provides to a given population, it is possible to estimate three indicators: first, the total number of people of a given population that is served by the system, without considering the grade or level of education of the individuals. This is an indicator of total coverage and is currently used under the name "specific schooling rate by age". Second, it is possible to calculate the fraction of a given population that is served at an education level that corresponds to its age level. This indicator measures coverage at level, and is currently used under the name "net enrollment rate in education level X". Finally, it is possible to measure coverage provided to a population in the grade that corresponds to age, or timely coverage. In this regard, see the chapter on indicators in the PRIE overview (PRIE 2003a).

14 Note that inconsistencies between enrollment rates of the population affect the calculation of this indicator. Thus, it is possible to see in some cases values above the limit of 100%.

It is important to note, however, that the net enrollment rate in primary education only provides us with information on access, often hiding inefficiencies in the system.This is because this indicator provides no information regarding either permanence in or completion of primary education.

FIGURE 7 SURVIVAL RATE TO THE FIFTH GRADE OF PRIMARY EDUCATION AND GENDER PARITY (INTER-ANNUAL FLOWS CORRESPONDING SCHOOL YEARS BEGINNING IN 1999 AND 2000)

Source: UIS. See data appendix.



The survival rate to the 5th grade of primary school indicates the percentage of a cohort of children enrolled in the first grade of primary school in a given school year who manage to reach the 5th grade.[15]

The purpose of this indicator is to measure the internal efficiency of education systems in terms of their capacity to assure that entrants are able to reach a given academic grade.

If the established goal is that all children finish primary school, it is desirable that the survival rate be near 100%, indicating a high level of efficiency of the education system. However, it is important to note that the survival rate refers only to the enrolled children. Thus, a survival rate of 100% indicates that all children enrolled in the 1st grade reach the 5th grade, and not necessarily all school-age children in the country. Moreover, reaching the 5th grade does not necessarily imply finishing this grade, and the 5th grade is not necessarily equivalent to the last grade of primary school.

The rate varies from nearly 100% in Chile, Trinidad and Tobago, and Aruba to 48% in Nicaragua. Moreover, in Latin America, the rates tend to be lower than in Caribbean countries. Keep in mind that national policies regarding grade repetition have a significant impact on survival rates. Countries in which grade promotion is associated with age, or is “automatic”, tend to show higher survival rates than those in which grade repetition is more marked.

15 This indicator is calculated using a reconstructed cohort model. For this reason, it is important to be aware of the assumptions of these models: stability in flow rates (grade promotion, grade repetition, and drop-out); no re-entries and no grade migrations. Although the indicator is conceptually very precise, verification of these assumptions and definitions used for data construction should be taken into account with particular care when analyzing the data. Although this indicator may also be calculated for any grade, it is useful to use the indicator calculated at the final grade of primary education (ISCED 1); however, traditionally it has been calculated and published at the 4th and 5th grades.

From the gender equity perspective, the situation is similar to that of other indicators. Most countries do not present a significant gender difference, and when there is a difference, it tends to favor girls (as in the case of Costa Rica, Paraguay, Colombia, Guatemala, and Nicaragua). The indicator is only favorable for boys in Uruguay.

However, the existence of individual indicators that are "more favorable" to boys or girls should not necessarily be interpreted as one of these being "better" than the other. Thus, as was noted in Educational Panorama of the Americas (p. 52), the existence of indicators more favorable, for example, to girls, may co-exist with other more complex problems that hinder a definitive judgment. In fact, lower grade repetition rates for girls may mean that those girls who do not pass a grade have a higher probability to drop out than to repeat in comparison with boys in the same situation. That is, the girls who do not pass a grade may have lower probabilities of continuing their studies than boys who do not pass a grade.[16]

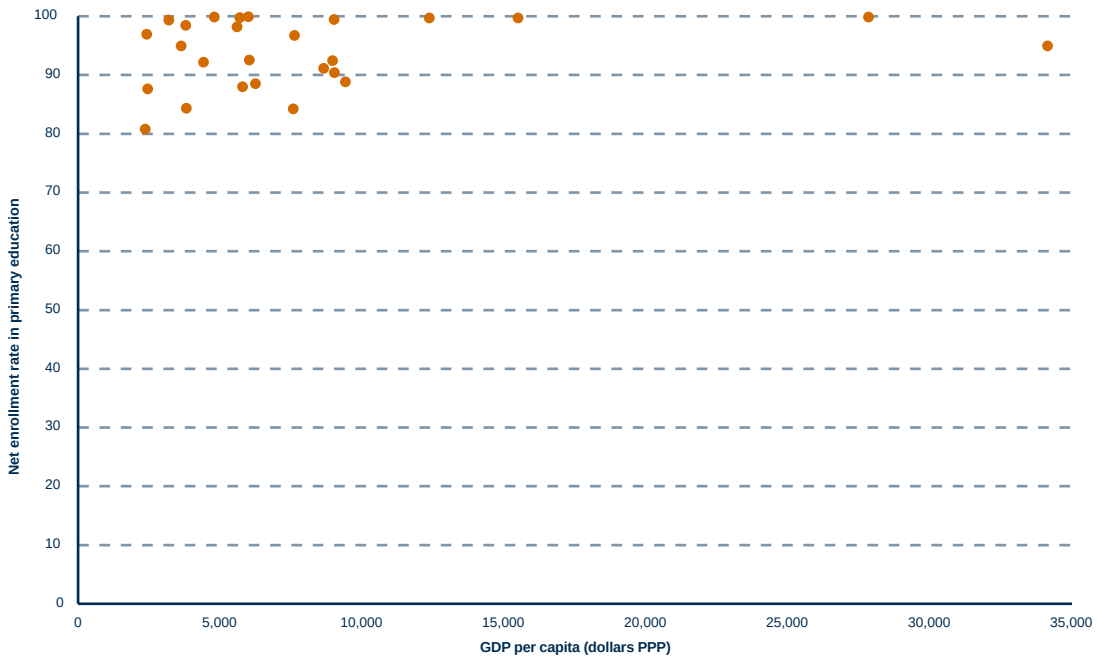
In effect, there has been much discussion about the relation between levels of education of the adult population and the levels of wealth of countries. Thus, and as we will see later, from an economic perspective it is said that higher levels of education are associated with greater productivity which, therefore, may lead to greater economic growth.

The following figures show the relationship between access to and completion of primary education and GDP per capita (expressed in PPA[17] United States dollars)

FIGURE 8

GROSS DOMESTIC PRODUCT PER CAPITA (2000, IN PPP DOLLARS) AND ENROLLMENT RATES IN PRIMARY EDUCATION (ACADEMIC YEAR 2000)

Source: UIS. and UNDP. See data appendix.

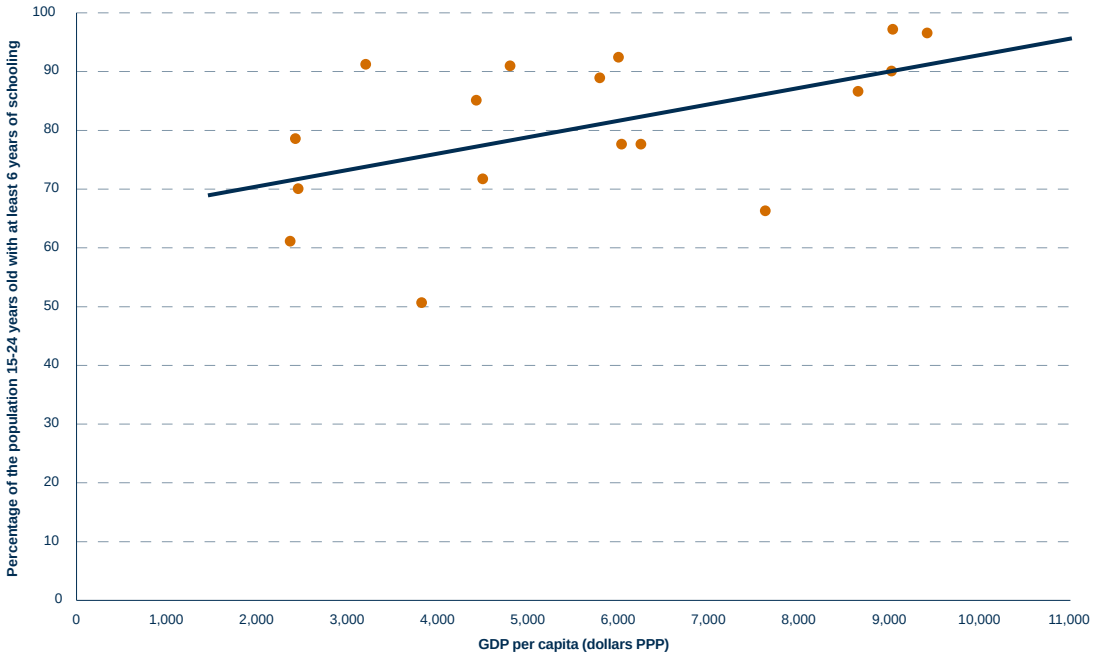


16 A more complete analysis of these interrelations between variables and their impact on gender equity may be consulted, for the Peruvian case, in ""Brechas de género en la educación peruana actual" in Guadalupe et. al (2001), La educación peruana a inicios del nuevo siglo. Ministry of Education, working document 12, MECEP. Available at http://www.minedu.gob.pe

17 PPP = purchasing power parity. This is a conversion factor that makes it possible to adjust nominal values according to the real purchasing power of $USD in the local market. In this sense, it provides better comparisons between countries. The GDP per capita values in PPP dollars are taken from UNDP (2002) Human Development Report. See data appendix.

FIGURE 9 GROSS DOMESTIC PRODUCT PER CAPITA (2000, IN PPP DOLLARS) AND POPULATION 15-24 YEARS OF AGE WITH LESS THAN 6 YEARS OF EDUCATION (CIRCA 2000)

Source: CEPAL, CELADE and PNUD. see data appendix.



As can be noted, there is no relationship in the region between GDP per capita and the levels of access to primary education. This clearly indicates that even countries with greater economic restrictions or relatively less wealth have been able to advance significantly in guaranteeing access to primary education. Thus, greater levels of national wealth are not, in our hemisphere, a condition for assuring access to this level of education.

Although access to primary education is not associated with the average level of wealth of a country, the completion of such studies does show a relation, although it is not a strong one.

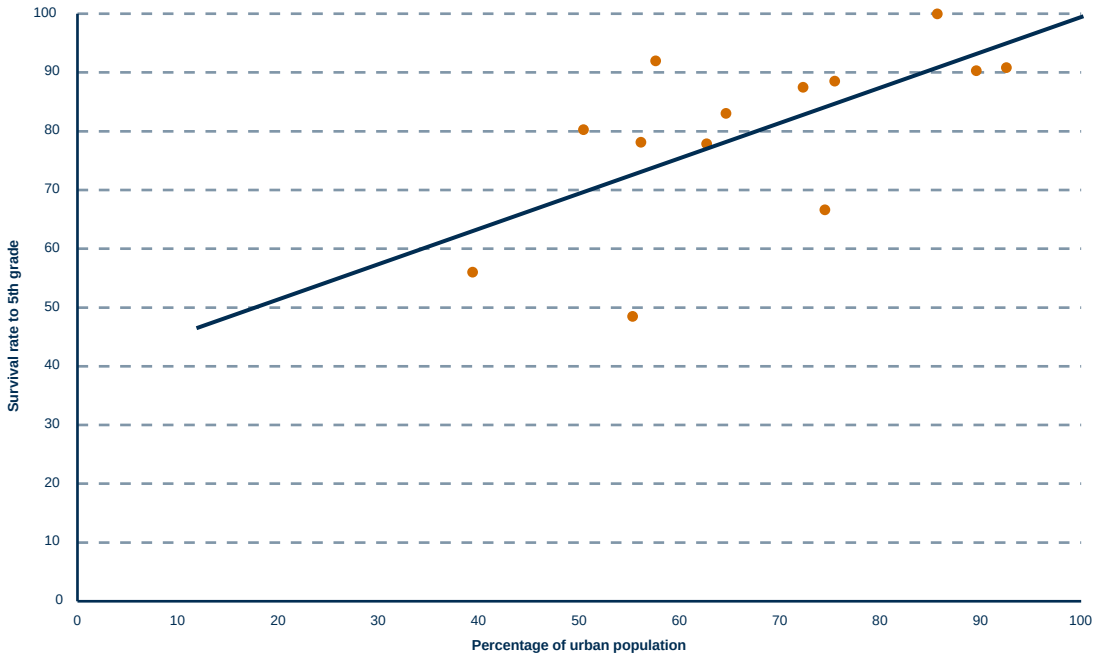
Access to the primary level, expressed in net entry rates to the first grade and in enrollments in primary education, is not associated with urbanization levels. This indicates that the supply of primary education services penetrates rural areas as well.

However, this relation begins to gain importance when we look at both the progress levels in the system (through grade survival rates) and the completion of studies at a given level (as shown in Figure 4).

PERCENTAGE OF THE URBAN POPULATION (2000) AND NET SURVIVAL RATE TO THE FIFTH GRADE (INTER-ANNUAL FLOWS CORRESPONDING TO SCHOOL YEARS BEGINNING IN 1999 AND 2000)

FIGURE 10

Source: UIS. CELADE, Population Division of the United Nations. See data appendix.



A key factor expressed by school survival rates is that of school drop-out. This is the phenomenon of children abandoning school, frustrating the possibilities of successfully completing their formal education and, as a result, of being able to go on to higher education or obtain better salaries in the labor market. This for its part strongly limits the probability of a person leaving situations of poverty and extreme poverty.
In the case of primary school drop-out, this reduces the probabilities of a person being able to continue advancing through the education system. It not only creates difficulties for the goal of universal primary education; it also hinders fulfillment of the goal of expanding access to secondary education.

ECLAC[18] states that during the last decade (1990-1999) drop-outs from primary school have decreased substantially. That is, there was a reduction of the proportion of young people from 15-19 years of age who, having enrolled in primary education as children, withdrew without completing this level.

Among the probable factors influencing this reduction are the increase of coverage of pre-school programs (associated with a lower probability of subsequent grade repetition), the creation of student retention programs (comprehensive programs such as Progresa in Mexico and Bolsa Escola in Brazil), the increase in numbers of schools, and improvements in infrastructure of rural areas, thus facilitating access to schooling of the population living in locations far from educational services.

In addition, one sees a great variation between countries. Moreover, in rural areas, school drop-out is higher than in urban areas.

Among factors associated with the drop-out phenomenon are, mainly, those related to economic problems (individuals who are working, seeking employment, or living in poverty) and family problems (pregnancy or motherhood and household responsibilities, principally).

Finally, other important factors associated with school drop-out are the level of education of the mother, and the family composition of the household (one parent or two parents). In effect, in urban areas, school drop-out among young people whose mothers possess 5 years less of education is markedly greater than that among the children of mothers with more than 5 years of education. Moreover, school drop-out is also greater among children from one-parent households than among those with two-parent households.

[18] The following analysis of school drop-out is based on ECLAC (2002) Social Panorama of Latin America, 2001-2002.

THE QUALITY OF PRIMARY EDUCATION

Although high levels of access to primary education have been achieved for the entire population, this increase has not always been accompanied by equivalent increases in quality.

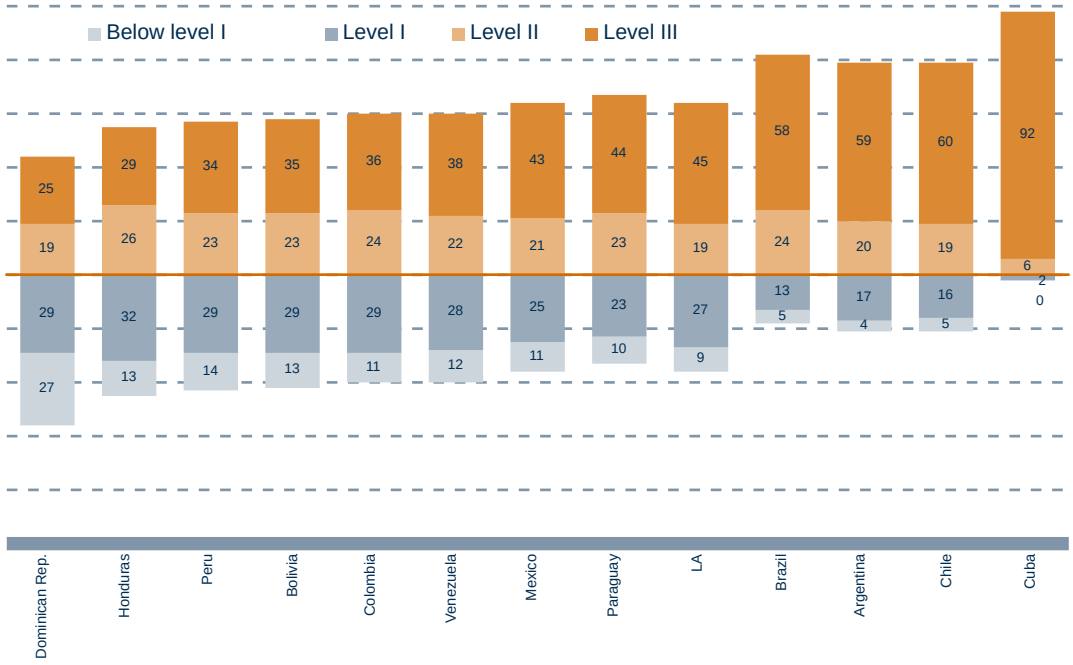
Available evidence[19] shows that the levels of academic achievement of students are strongly correlated with their social and economic conditions, and that although schools can play an important role in countering the impact of pre-existing social conditions on student learning, this is not the norm.

In effect, the results of LLECE studies show that the performance of children living in urban areas varies between countries, and that there are marked differences between their achievement levels. Figure 11 shows the percentages of students in each performance level of the language exam for urban areas. We can see that in the region, nearly 10% of children who live in urban areas do not achieve level I and, therefore, are not able to carry out the most basic tasks. This situation varies by country. In effect, in urban areas, in Argentina, Brazil, Chile, and Cuba, there are practically no children below level I (4%,5%,5%, and 0%, respectively); while in the Dominican Republic, nearly 30% of children are below that level. Moreover, nearly 60% of children are below level II; that is, they are only able to carry out basic language tasks.

The countries with the smallest percentages of children below level I (Argentina, Brazil, Chile, and Cuba) are also those that have the largest number of children at the highest level; that is, they have a larger percentage of children who are able to carry out complex reading tasks. In these countries, around 6 of every 10 children are at level III, while in the rest of the countries this varies between 2 and 4 children out of 10. Cuba is an exception in the region, since practically all children (9 out of 10) are in level III – meaning that almost all children are able to carry out more complex tasks.

FIGURE 11 DISTRIBUTION OF STUDENTS BY PERFORMANCE LEVEL, URBAN AREAS, LANGUAGE (1997)

Source: Developed by PRIE based on information from LLECE, Technical report (2001). See data appendix.



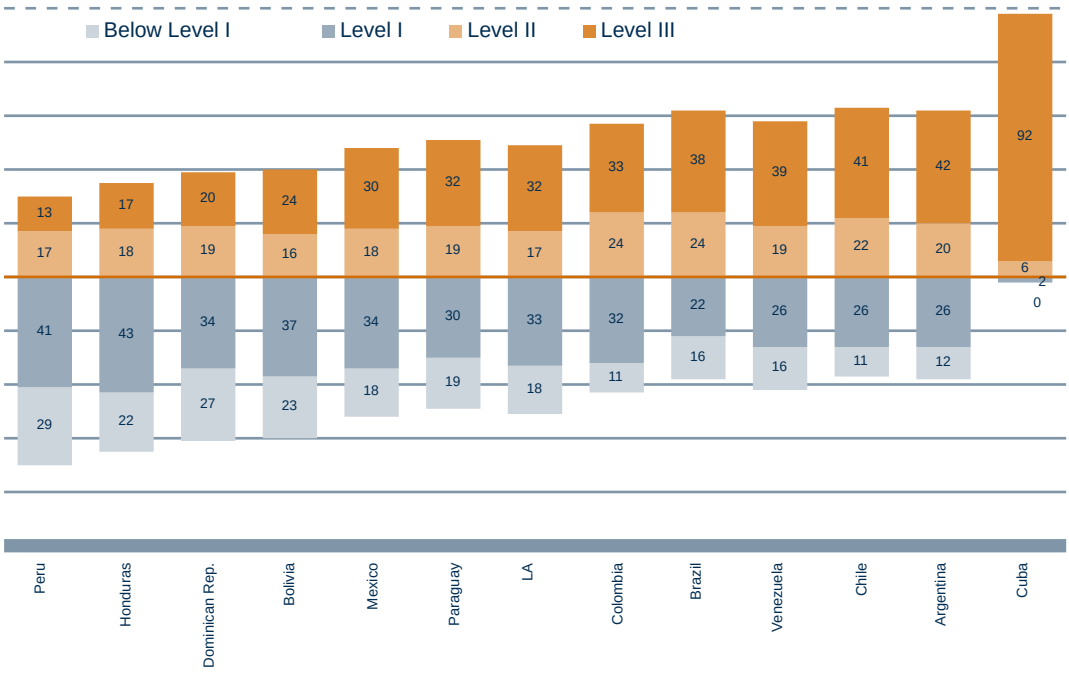
19 In the above-cited reports of the First International Comparative Study carried out by the LLECE, Information on achievement levels may be found in UNESCO (2001) Latin American Laboratory for Assessment of the Quality of Education. Technical Report.

In rural areas, although the situation is important in terms of magnitude, nearly 2 out of 10 children do not achieve level I (double the rate for urban areas), the differences between countries are not large. As can be seen in Figure 12, in all countries, with the exception of Cuba, more than 10% of children do not achieve level 1, with these percentages varying from 11% in Chile to 29% in Peru. If levels 0 and I are taken together, of the 12 countries studied, more than 50% of children are included, a figure that reaches 70% in the case of Peru. This means that in those countries, at least one of every two children living in rural areas is only able to carry out the most basic language tasks.

Moreover, note that the percentage of students who attain level III is substantially lower in rural areas. In seven of eleven countries, 30% or less attain this level, and only in four countries do 40% of the children attain this level. Cuba continues to be an exception. The achievement of Cuban students is similar in both rural and urban areas, and is much above average for the region.

DISTRIBUTION OF STUDENTS BY PERFORMANCE LEVEL, RURAL AREAS, LANGUAGE (1997) FIGURE 12

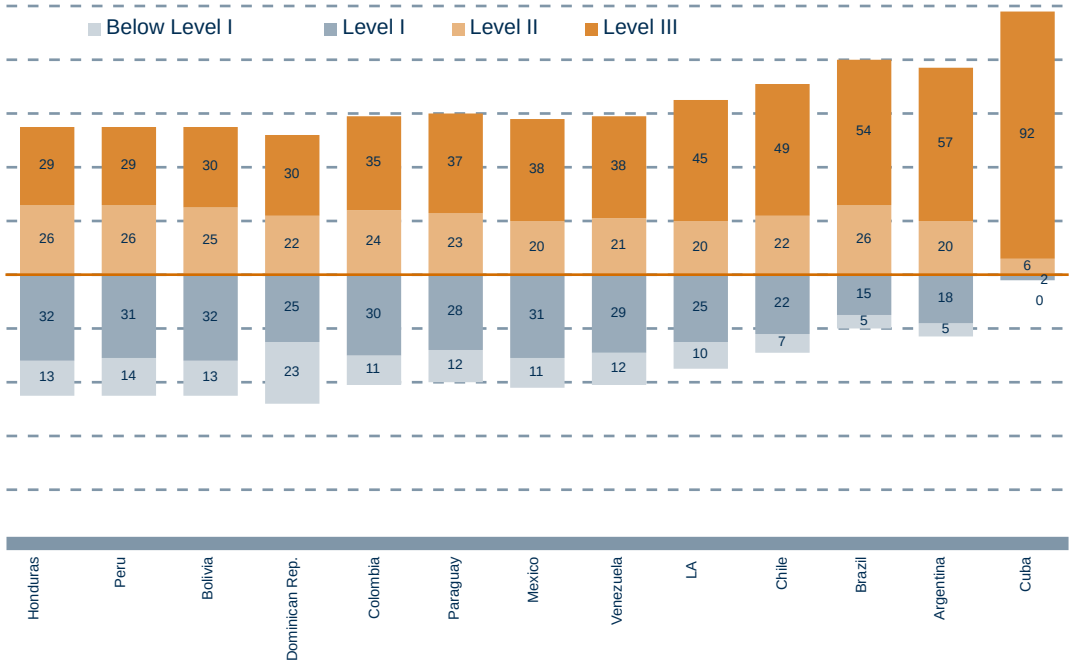
Source: Developed by PRIE based on information from LLECE, Technical Report (2001). See data appendix.



Performance differences are not only associated with the geographic area in which children live. We also note differences when looking at students in private and public schools. In the case of public schools, in Argentina, Brazil, Chile, and Cuba, there are practically no students below level I. The highest figure is in the Dominican Republic, in which nearly 20% of children cannot complete basic language tasks. The greatest differences between countries is revealed when we compare the percentages of children who achieve level III. This figure varies from 29% in Honduras to 92% in Cuba. That is, in Honduras, 3 of every 10 children are classified in level III, which means they are able to carry out more complex tasks, while in Cuba, nearly 9 of every 10 children are at this level.

FIGURE 13 DISTRIBUTION OF STUDENTS BY PERFORMANCE LEVEL, PUBLIC SCHHOLS, LANGUAGE (1997)

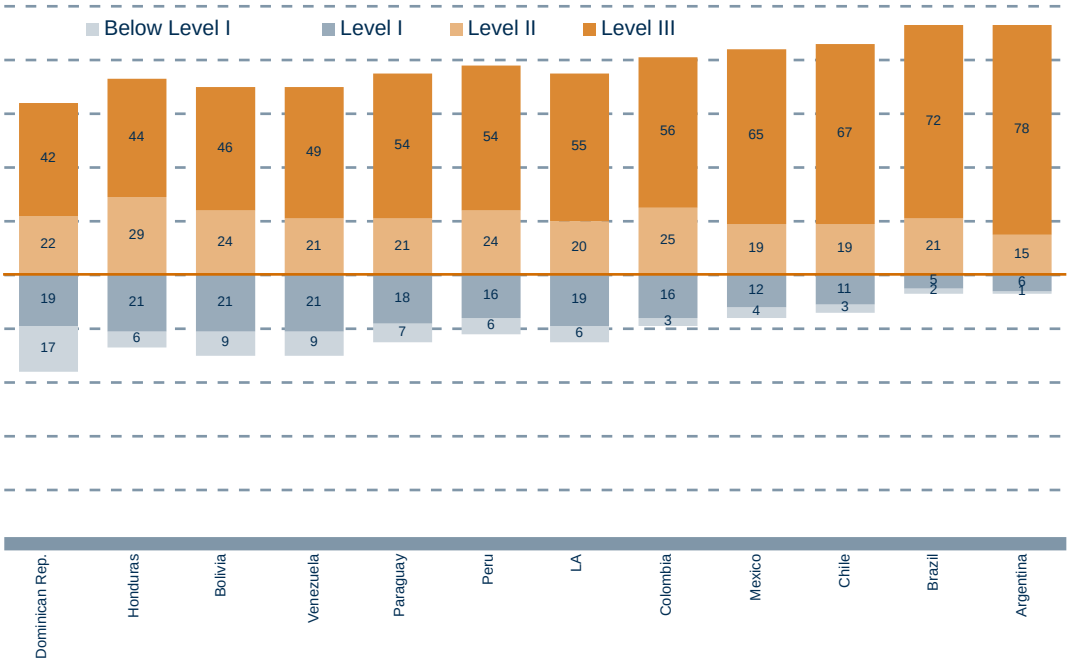
Source: Developed by PRIE based on information from LLECE, Technical Report (2001). See data appendix.



In the case of private schools, in all countries, except the Dominican Republic, less than 10% of children are at level I, and in all countries, more than 40% of children are at level III. This figure reaches 78% in the case of Argentina. This means that in private schools, many more children are at a higher performance level than those in public schools.

FIGURE 14 DISTRIBUTION OF STUDENTS BY PERFORMANCE LEVELS, PRIVATE SCHOOLS, LANGUAGE (1997)

Source: Developed by PRIE based on information from LLECE, Technical Report (2001). See data appendix.



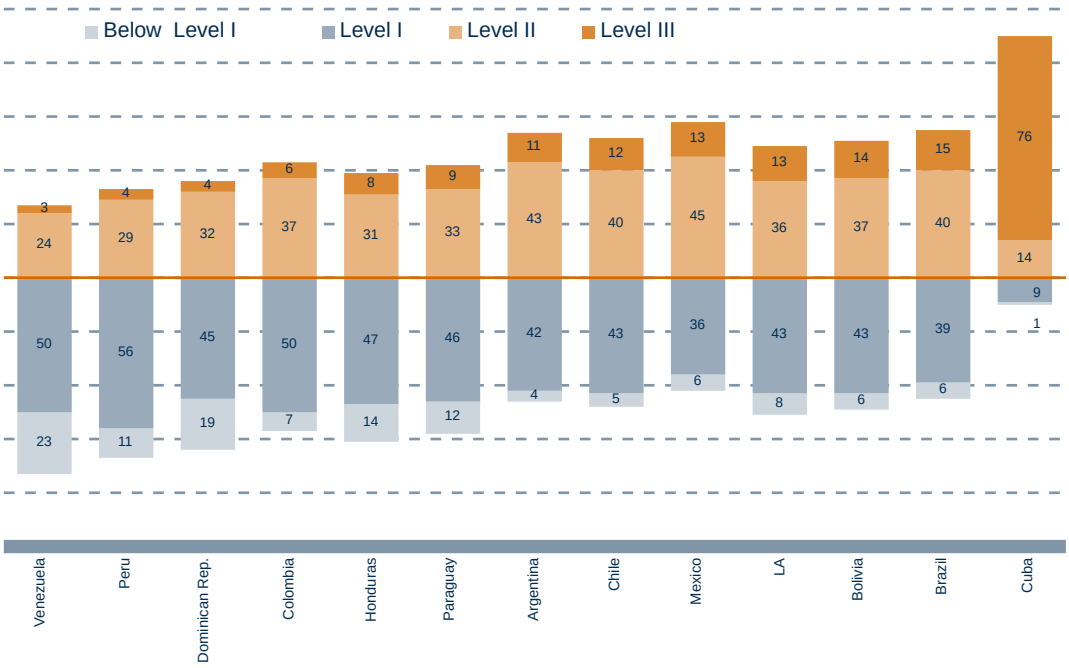
Although the results show differences between the performance of students in public and in private schools, the analysis of associated factors shows that, after controlling the results by socioeconomic status of students, these differences disappear. That is, the differences in scores are due principally to the fact that a greater proportion of students from low socioeconomic status attend public schools, and a greater proportion of students from high socioeconomic status attend private schools. Thus, the differences in student performance between kinds of school are explained in part by the social and economic characteristics of the students attending these schools.

Additionally, Figure 15 shows the percentage of students in each mathematics performance level in urban areas. As can be seen in the table, more than 40% of children achieve only level I, a figure that reaches 70% in Venezuela. This means that between 4 and 7 of every 10 children can only carry out basic exercises in mathematics. In all countries, with the exception of Cuba, a low percentage of students are at level III. In Cuba, slightly more than 70% of children are at the highest level. The figure for Brazil, which has the highest proportion of students at this level after Cuba, is 15%. This is different from what we see for language, for which in the majority of countries more than 40% of children are at level III.

FIGURE 15

DISTRIBUTION OF STUDENTS BY PERFORMANCE LEVELS, URBAN AREAS, MATHEMATICS (1997)

Source: Developed by PRIE based on information from LLECE, Technical Report (2001). See data appendix.



The test results in mathematics for students living in rural areas is similar to what we see for language, although more extreme. In this case, in all countries, more than 50% of students are able to only carry out the most basic tasks, while very few (no more than 10%) are able to execute more complex tasks.

METHODOLOGICAL NOTE

This note describes the way in which this report has approached measurement of the goal regarding the completion of quality primary education studies. It treats the information and indicators selected, explains the reasons for their selection, and details the scope of the information used.

On the measurement of universal completion of primary education:
As of this time, there is no general agreement regarding the best indicator for directly measuring universal completion of a given level of study.[20] This situation follows from both the fact that traditionally-produced information on education has focused more on measuring enrollments or the internal efficiency of education systems than on aspects of coverage. The latter necessarily involve tying demographic information into that on enrollments,[21] and the complex methodological difficulty of measuring the completion of studies of a population that has not, due to its age, completed those studies.

Currently, we have indicators for access to and for performance within the system. The former measures fractions of the population who access educational services. Thus, we have net entrance rates and net enrollment rates. Net entrance rates measure the proportion of individuals of the official age to enter the first grade of primary education and who effectively do so. Net enrollment rates measure the proportion of individuals within the officially-defined age range to study in primary school who are actually enrolled at this level. In both cases, one does not consider the population that may enter the system late, or study at a given level while being above the official age to do so.[22]

Indicators of progress through the school system are usually hypothetical rather than empirical, since time series studies are not available. Therefore, those who effectively entered at a given time, would pass through the education system. That is, it does not consider information about the population that is outside the system. Nor is this remedied using access information, given the nature of such data.

PRIE has therefore proposed and adopted a way to measure education levels concluded that is based upon information on the population as a whole.[23] In effect, it is possible to measure within the population which, given its age, has had the opportunity to conclude its studies, the proportion that has effectively been able to conclude primary school studies.

Thus, if we observe information corresponding to the number of years of schooling achieved by the population 15-19 years of age, we have a direct measure of completion of primary education as long as we know the number of years that correspond to the theoretical duration of this level.

In order to assure comparability between countries, it is necessary that this information be expressed in terms of the duration of primary schooling, standardized through the use of the International Standardized Education Classification (ISCED 1997).

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[20] For a critical review of the current debate, see Guadelupe, C., and Louzano, P. (2003) Measuring Universal Primary Completion in Latin America. Available at http://www.unesco.cl/siri

[21] Current gross enrollment rates use population information in order to establish a relative scale for measurement of enrollments. In this sense, there is no need for correspondence between populations to which the numerators and denominators refer. Net enrollment rates, for their part, do establish this relation, but in an insufficient manner for the requirement here, as explained below.

[22] In addition, there are gross, or apparent entrance and enrollment rates. Both are measures of population size - of the entering population, in the first case, and of the enrolled population in the second, since they use as numerators the total number of people who fulfill the condition (entrants or enrollees, respectively),and as denominator a reference population of which the numerator is not, necessarily, a sub-set.

[23] This proposal may be found in the PRIE overview (2003a), and was discussed at a technical meeting of the project in December, 2002. The underlying basis of the proposal may be found in Guadelupe, C. (2002) Cobertura, eficiencia y flujo escolar. Available at http://www.unesco.cl/siri. A similar proposal that also introduces historical trends as a mechanism for projecting the probabilities of children concluding their schooling was presented at the Regional Workshop on Education Statistics for Latin America of the Institute of Statistics of UNESCO (Quito, April, 2003), which received the support of all participating countries. Details of this proposal may be found in Guadelupe, C., and Louzano, P. (2003) Measuring Universal Completion in Latin America, which is available at http://www.unesco.cl/siri.

Unfortunately, the information currently available (CEPAL, Social Panorama of Latin America) is organized by years of study attained, and not by ISCED levels. Also, it corresponds to the 15-24 age group, and not to the age range used by PRIE (15-19 years). In spite of these limitations, PRIE feels that this is the best information available to directly measure, although approximately, completion of primary school studies.

Information on net enrollment rates and survival rates to the 5th grade of primary school used in this report is intended to show the current dynamic of access into and progress through education systems.

On the measurement of the quality of primary education:
The Latin American Laboratory for Assessment of the Quality of Education (LLECE) is a network of national systems of Latin American countries for assessing the quality of education. It was created in 1994, and is coordinated by UNESCO's Regional Bureau of Education for Latin America and the Caribbean.

In 1997, the LLECE developed the First International Comparative Study of Achievement in Language, Mathematics, and Associated Factors for Children in the 3rd and 4th Years of Primary Education. This study focused on measuring the degree of mastery of certain curricular content in both subjects. In language, it assessed achievement in reading comprehension, meta-linguistic practice, and text production. In mathematics it covered numeration, operating with natural numbers, common fractions, geometry, and measurement.

A total of 13 Latin American countries participated: Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Honduras, Mexico, Paraguay, Peru, the Dominican Republic, and Venezuela.[24]

Achievement levels
In order to analyze the results, LLECE established achievement levels, which are comparable to skills analysis, and which make it possible to identify what a student, or a group of students, can and cannot do.

For both the language and the mathematics tests, three achievement levels were established. These levels are inclusive; i.e., if a student passes the highest level it is because he or has passed lower levels as well. Correct responses to 60% of the questions was established as the criterion for determining if a student successfully attained a given level. That is, students were required to correctly respond to 60% or more of the questions of a level in order to classified as having mastered that achievement level.

Language
Level I (primary literal reading). This is the most basic and simple reading level, and involves recognizing explicit structures on the local level: identifying the actors in a story, the key fragments of an argument, and explicitly stated relations.

Level II (literal reading in paraphrases). This level presents a higher degree of complexity of reading and demands a translation of words, regulated by the literal meaning of the text. The questions ask the student to describe the text in other words, without necessarily offering a profound interpretation.

Level III (inferential reading). At this level, students are required to fill empty spaces of the text, explain assumptions upon which the text is based, link propositions at the micro and macro-textual levels, and identify different forms of relations implicit in the text. The questions demand relating part of the text based on a partial theme, and recognizing textual forms.

[24] The results for Costa Rica were not published "because they were not delivered according to the requirements of timeliness and standardization established by the Laboratory (UNESCO [1998] p.12.] Note that the Republic of Cuba is not included in the rest of this report, given that its membership in the Organization of American States has been suspended since 1962. Nevertheless, its information has been considered as an important part of the results of the first study of the LLECE.

MATHEMATICS

Level I (basic mathematics). Students mastering this level are able to complete habitual exercises that require superficial recognition of mathematical structures. They must master elemental mathematical language and skills linked to reading and writing numbers, recognizing geometrical figures, identifying simple patterns, and carrying out elemental operations.

Level II (recognizing the use of simple mathematical structures). Students at this level are able to recognize simple mathematical structures. They can carry out both routine classroom exercises as well as solve simple problems that require mastery of the four basic mathematical operations.

Level III (recognition and use of mathematical structures). On this level are those students who are able to recognize complex mathematical structures. They are able to deal with situations that require both usual and more complex procedures for their resolution, and can solve problems that require recognition of the structure of the decimal system and treat positional values in order to establish equivalencies.

It should be noted that the definition of achievement levels used in this study refers to the minimum curricular established by countries. That is, one cannot use the outcomes to make judgments about whether the best achievement levels observed correspond or not to the needs or challenges of contemporary society. Such a judgment would require a complementary analysis of the curricular objectives themselves. In effect, the evidence is not sufficient to allow us to state if such curricular objectives are or are not adequate for such needs and challenges.

B. SECOND GOAL:

ACCESS TO QUALITY SECONDARY EDUCATION

DEFINITIONS

The Plan of Action of the Summit of the Americas states the need to not only assure universal completion of quality primary education, but also to provide significant levels of access to and completion of quality secondary education.

Thus, the second education goal of the Summit of the Americas speaks to an additional concern stemming from the existence of growing evidence that people require levels of schooling that go beyond primary education in order that they may have a greater probability of escaping poverty. This goal responds to evidence of a positive relationship between higher levels of schooling and economic development, as well as of greater prosperity.

Studies carried out by ECLAC regarding the transfer of education capital between generations show that finishing secondary education and studying for a minimum of 12 years significantly increase the probability of a person being able to escape poverty.[25]

The latest report of the World Education Indicators Project (WEI) showed that the economic returns of education increase with each level of education. In countries such as Brazil, Chile, and Paraguay, finishing secondary school represents an important increase in perceived income. For example, in Paraguay, a person with a lower secondary education earns only one-fourth as much as a person who has finished secondary schooling.[26]

In contrast to the case of primary education, levels of access to this level of education show more variability. Therefore, this goal presents different challenges for the participating countries in the Summit of the Americas. For example, in countries with high levels of geographic dispersion of their populations, the challenge is to develop operational modalities that make possible the increase of secondary education services. In other countries, access to secondary education is already a given, and the concern is centered on the quality of such education and the possibility for young people who enter this level to continue in it without dropping out.

These levels of schooling correspond to what is known as secondary education. The term covers refers both to both the higher or final cycle of "basic education" (lower secondary) and the cycle of greater development of specialized learning (higher secondary). As in the case of assessment of the situation in regard to the first goal, in order to assure international comparability in substantive terms, we will here use the ISCED terms – in this case, ISCED 97 levels 2 and 3.

Thus, the goal refers to young people entering these levels of education. For the purposes of this report, we understand as the reference population that which constitutes the population group between the ages officially established as corresponding to these levels. Thus, this report will consider as levels of access to the portion of the population of the official age to undertake secondary studies and who are so doing. It should be remembered that, given this definition, those who do not enter secondary education are not necessarily excluded from the education system, since they may be undertaking studies corresponding to another level (for example, primary), given the existence of delayed progress in schooling.

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25 CEPAL (1997) Panorama Social de América Latina, p. 66.

26 UNESCO/OECD (2003) Financing Education: Investments and Returns. Analysis of the World Education Indicators 2002.

At the same time, the goal requires verifying that the levels of completion of secondary studies are growing over time. Therefore, and similarly to the case of primary education, the measurement of completion should refer to the probability of finishing studies on the part of the reference population that, given its age, has had the opportunity to finish its studies.

Before treating the goal of universal completion of primary education, we presented some thoughts regarding the complex and multi-dimensional character of the quality of education, emphasizing that this involves pedagogical, social, cultural, and economic questions. We also mentioned the fact that national assessment systems of the quality of education have worked in a way that emphasizes academic achievement of students in that such an emphasis reflects the central objective of education systems (to develop learning and thus, improved opportunities for people).

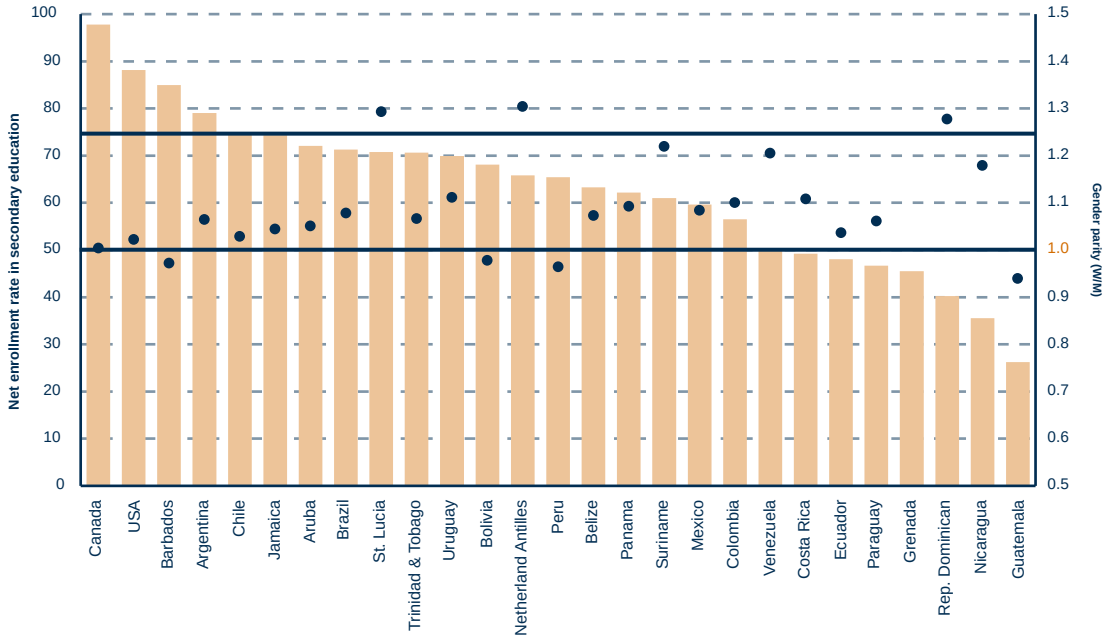
The analysis of the quality of secondary education presented in this report will refer to information on the 7 countries in the hemisphere which have participated in the Program for International Student Assessment (PISA). This corresponds to the achievement measurements of students 15 years of age who currently study in some grade of secondary education.

THE CURRENT SITUATION

The goal regarding secondary education refers to access to this level of education, as well as growing levels of completion. Thus, in order to directly measure access, we will use the net enrollment rate at each level. In order to observe completion of this level of education we will follow a procedure similar to that used in the case of primary education.

FIGURE 16 NET ENROLLMENT RATE IN SECONDARY EDUCATION AND GENDER PARITY (ACADEMIC YEAR BEGINNING IN 2000)

Source: See data appendix.



The net enrollment rate in secondary education represents the enrollment of individuals of the official age to study in secondary school as a percentage of the corresponding population. The purpose of this indicator is to show the access to this level by people of the age to be studying in the secondary level.

Figure 16 shows the net secondary enrollment rate for the Americas. This rate varies between 26.2% in Guatemala to 97.8% in Canada.

Canada, the United States, Barbados, and Argentina are the only countries that have achieved the goal of 75% access. Chile, Jamaica, Aruba, Brazil, Santa Lucia, and Trinidad & Tobago are very close to this (more than 70% access). On the other hand, Costa Rica, Ecuador, Paraguay, Granada, Dominican Republic, Nicaragua, and Guatemala are able to assure access to this level of education to less than half of the population of the age to be at this level.

In general, access levels tend to present differences between men and women in favor of the latter. These differences are particularly marked in Santa Lucia, Netherlands Antilles, Dominican Republic, Surinam, Venezuela, and Nicaragua. Smaller differences in favor of the male population exist in Guatemala, Peru, Bolivia, and Barbados. Note that in the case of the three Latin American countries, these are countries with large indigenous and rural populations.

Information indicates that there is currently a low level of coverage at this level, accompanied by great differences in access between countries. This fact has strong implications for the development of the region and the possible fulfillment of the goal set at the Summit of the Americas.

Moreover, the goal of the Summit of the Americas not only refers to levels of access; it also mentions the need to assure growing levels of completion of secondary education.

PERCENTAGE OF THE POPULATION 15-24 YEARS OF AGE WITH AT LEAST 10 YEARS OF SCHOOLING AND GENDER PARITY, CIRCA 2000

FIGURE 17

Source: Developed by PRIE whit data from ECLAC and CELADE. See data appendix.

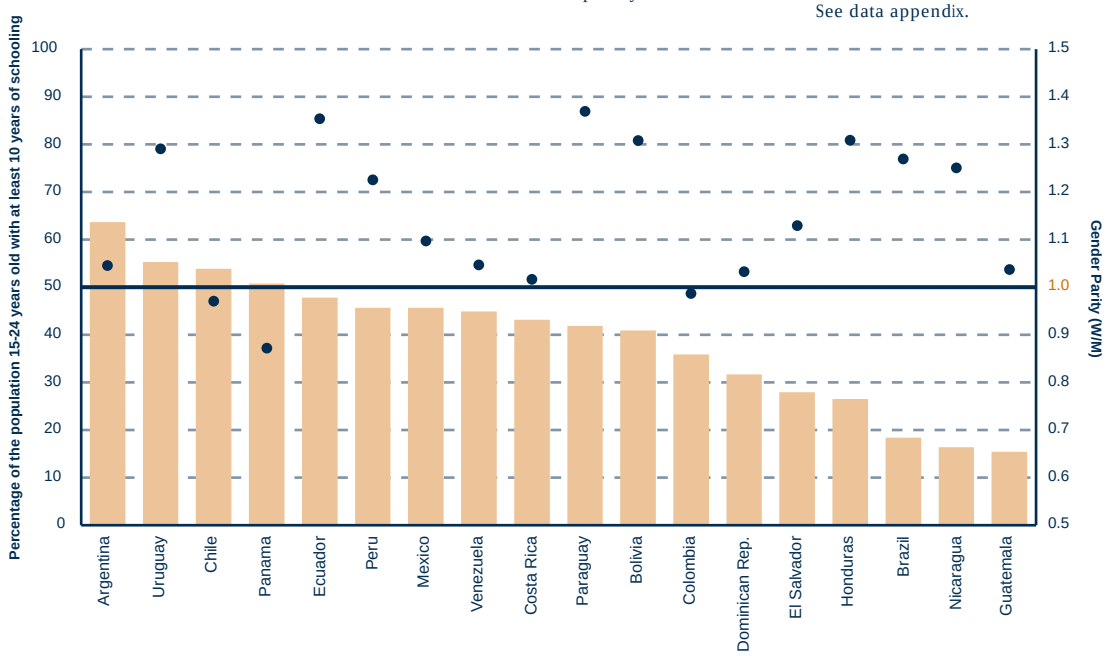


Figure 17 shows the percentage of the young population with at least 10 years of study. In general, a person who possesses 10 years of study has finished lower secondary school and one or two years of higher secondary, depending on the country.[27]

Argentina, Chile, Peru, and Bolivia are the only countries in which the majority of the adult population has at least 10 years of schooling. This indicates that these countries have made sustained efforts through time to offer education to the majority of their populations.

On the other side of the distribution, we find countries such as Costa Rica, El Salvador, Honduras, Brazil, Nicaragua, and Guatemala, in which less than 1 in 3 young people have 10 years of schooling.[28]

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27 The data source used obliges us to work with this age range and this number of years of education. PRIE suggests that years of schooling corresponding to ISCED 2 and 3 for the population group 19 to 24 years of age be used in order to measure completion of secondary education. See the methodological note in this chapter and in the chapter on the indicators component in the The Experience of the Regional Education Indicators Project (PRIE 2003a)

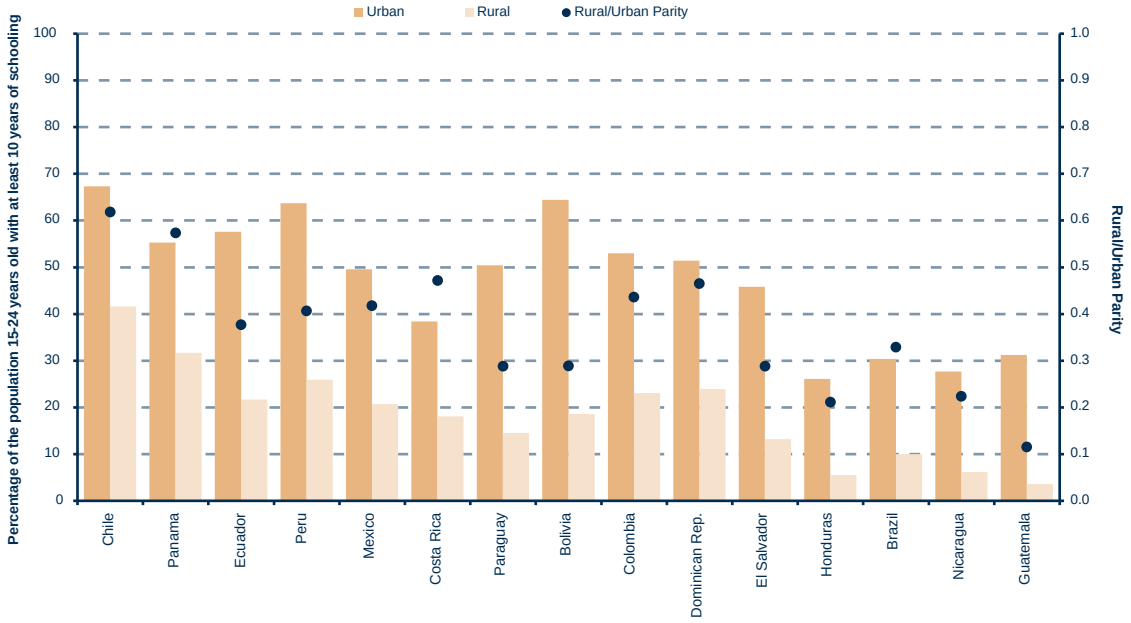
28 Note that in Brazil, lower secondary school is the equivalent of 8 years of education; in other countries which provide information for this variable, it is 9 years.

It is also notable that, with the exception of Peru, Bolivia, and Paraguay, all of the countries considered present values that favor the female population; especially in Uruguay, Venezuela, and the Dominican Republic.

Figure 18 shows the differences between percentages of the population 15-24 years of age with at least 10 years of schooling, by area of residence. It is clear that the probability of finishing lower secondary education is markedly less in rural areas. In Chile, where this disparity is less, the proportion of young people who complete 10 years of education is 1.6 times larger in urban areas, while in Guatemala the proportion is 9 times larger.

FIGURE 18 PERCENTAGE OF THE POPULATION 15-24 YEARS OF AGE WITH AT LEAST 10 YEARS OF SCHOOLING, BY AREA OF RESIDENCE (CIRCA 2000)

Source: Developed by PRIE whit data from ECLAC and CELADE.
See data appendix.

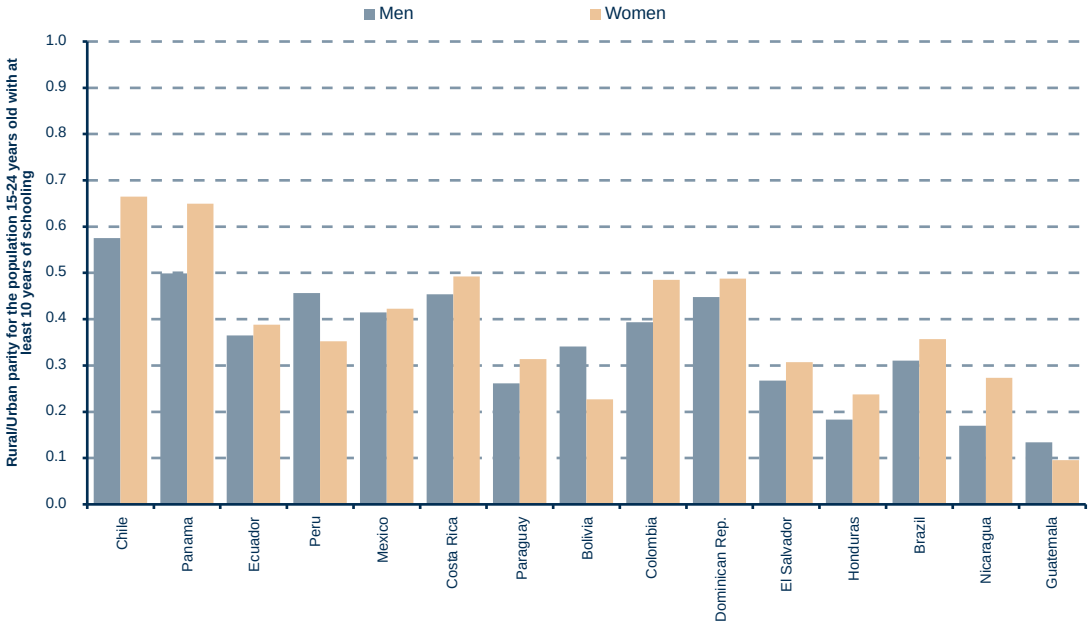


Also notable is the existence of a pattern associated with gender in regard to differences between urban and rural areas. In effect, in most of the countries observed, the adverse conditions in terms of schooling attained associated with rural areas more greatly affect the male population. Exceptions to this are Mexico and Ecuador, where the relation does not hold. In Peru, Bolivia, and Guatemala, the trend is reversed; that is, education disparities within rural areas tend to be greater in the case of females.

RURAL/URBAN PARITY, DISAGREGGATED BY GENDER FOR THE POPULATION 15-24 YEARS OF AGE WITH AT LEAST 10 YEARS OF SCHOOLING (CIRCA 2000)

FIGURE 19

Source: Developed by PRIE whit data from ECLAC and CELADE. See data appendix.



Compared to what we have seen in the case of primary education, on the secondary level there is a more robust relationship between progress toward the goals of the Summit and levels of urbanization. Countries with higher levels of urbanization show higher levels of access to, and especially, completion of this level of education.

NET ENROLLMENT RATES IN SECONDARY EDUCATION, AND PERCENTAGE OF URBAN POPULATION (2000)

FIGURE 20

Source: Developed by PRIE whit data ECLAC and CELADE. See data appendix.

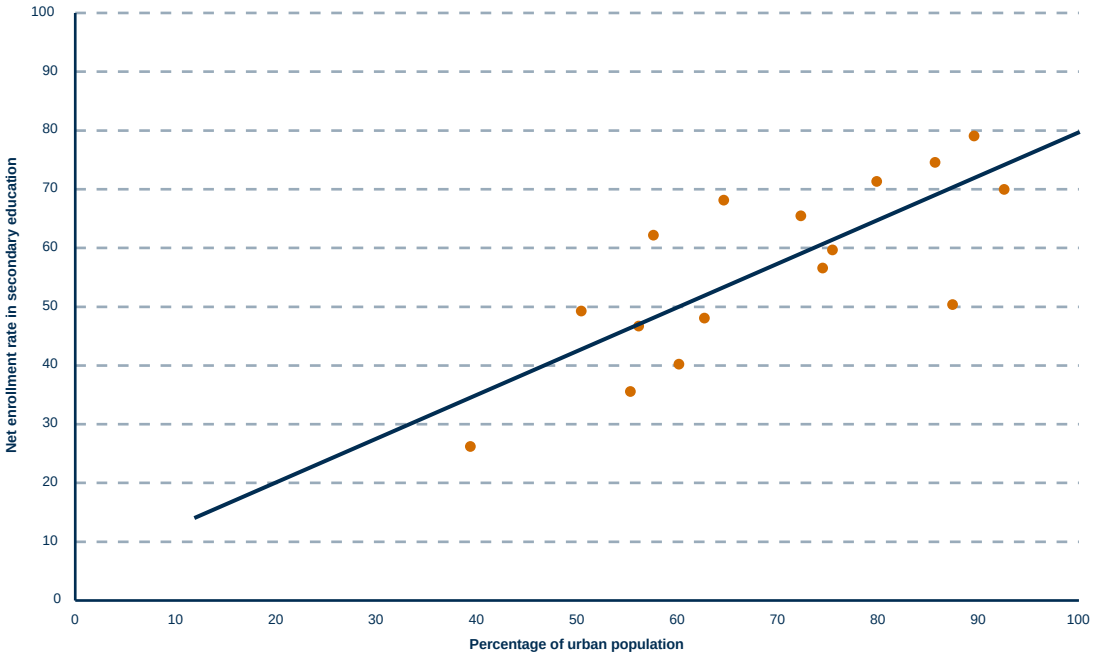
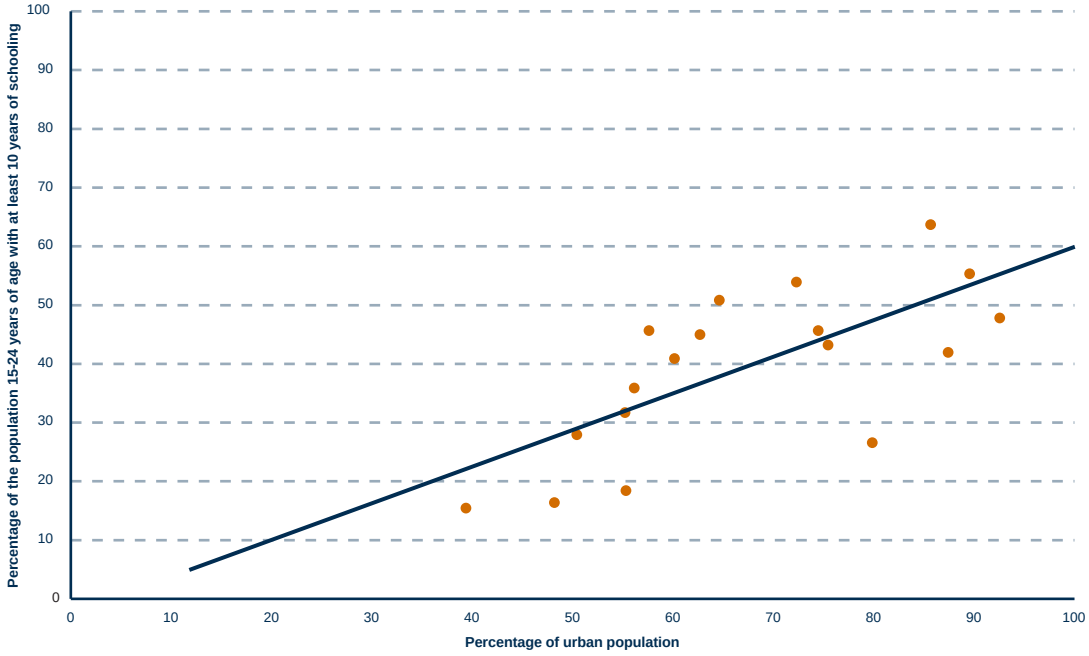


FIGURE 21 PERCENTAGE OF THE POPULATION 15-24 YEARS OF AGE WITH AT LEAST 10 YEARS OF SCHOOLING (CIRCA 2000) AND PERCENTAGE OF URBAN POPULATION (2000)

Source: Developed by PRIE whit data from ECLAC and CELADE. See data appendix.



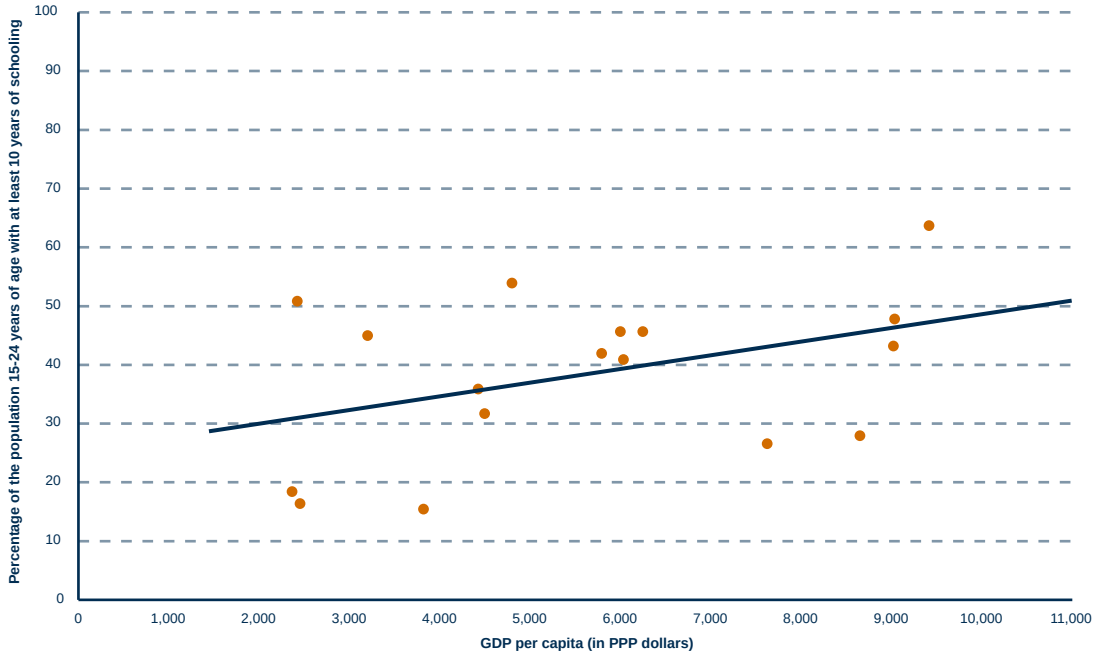
This relationship ratifies the observation of Educational Panorama of the Americas (p.53) that there is a greater relative concentration of the supply of secondary education services in urban areas and less penetration of these services in rural areas.

To these factors should be added the fact that in families in rural areas there is greater pressure on young people of secondary school age to work.

Note also that at levels in which the population possesses less than 10 years of education, there is a weak association with the relative average levels of wealth of countries. In effect, some countries have achieved more progress in this area than would be expected, given their levels of wealth.

FIGURE 22 PERCENTAGE OF THE POPULATION 15-24 YEARS OF AGE WITH LEAST 10 YEARS OF SCHOOLING (CIRCA 2000) AND GDP PER CAPITA (IN PPP DOLLARS)

Source: Developed by PRIE whit data from ECLAC and CELADE. The UNDP is the source for GDP per capita. See data appendix.



Current secondary school net enrollment rates hinder fulfillment of the second goal established by Heads of State at the Summit of the Americas. This, in turn, limits the possibilities of moving toward higher secondary school completion rates.

Difficulties in access to and completion of secondary education are related to the number of people who abandon schooling when they conclude their primary education, and to those who, having completed part of a secondary education course, leave before concluding it.

In analyzing the distribution of young people 15-19 years of age who abandoned the education system during the 1990s,[29] according to the stage of education which they left, we note that in 12 of the 18 Latin American countries studied, more than 60% of individuals left after having completed primary school, or during secondary school studies. That is, almost 2 out of every 3 young people who live in urban areas dropped out of the school system upon entering secondary school or during secondary school studies. This trend is less marked in rural areas. In only 8 of the 15 Latin American countries analyzed did more than 50% of the young people who dropped out of school did so upon moving from primary to secondary education or during secondary schooling. This is related to the limited supply of secondary education services in rural areas.

Still, drop-out rates upon the termination of primary school fell in the last decade (1990-1999), with the proportion of young people who finish primary school and continue into secondary studies having increased.

This reinforces the importance of programs that are directed at keeping people in school. As we mentioned in the section on primary education, in Latin America there are successful initiatives in this area, such as the Progresa program in Mexico, the Bolsa Escola program in Brazil, and the Liceo para Todos program in Chile which provides both financial aid to students and the development of pedagogical and psycho-social programs for schools in order to improve the educational process and the conditions within which it develops.

An important element to consider is that, in spite of the decrease in drop-out rates upon completion of primary schooling, the gap between rural and urban areas has not changed significantly. In this regard, Honduras shows the greatest difference in these drop-out rates by urban/rural residence. These differences have to do with the problems of access to secondary education services for geographically isolated populations. For example, in Paraguay, 4% of women 15-19 years of age living in urban areas drop out before completing secondary schooling, reporting for the reason difficulties in access or distance from a school. In rural areas, however, this reason was mentioned by 20% of female school drop-outs. In all of the other countries analyzed, we also see this kind of difference, indicating that in rural areas, the problems of access are a reason for the non-continuation of studies.

However, the most important factor appears to be economic, given that the differences between levels of drop-out by income quartile are marked.

Thus, the gaps observed when comparing school drop-out in urban and in rural areas could also reflect the fact that it is in rural areas that we find concentrated the greatest proportion of low income individuals - the poor and the extremely poor.

[29] Based on ECLAC (2002), Social Panorama of Latin America, 2001-2002.

THE QUALITY OF SECONDARY EDUCATION

While looking at the levels of access to and completion of secondary education, it is also necessary to be aware of the quality of the services offered.

Available evidence[30] shows that the performance of countries in the region in a combined reading scale varies considerably.

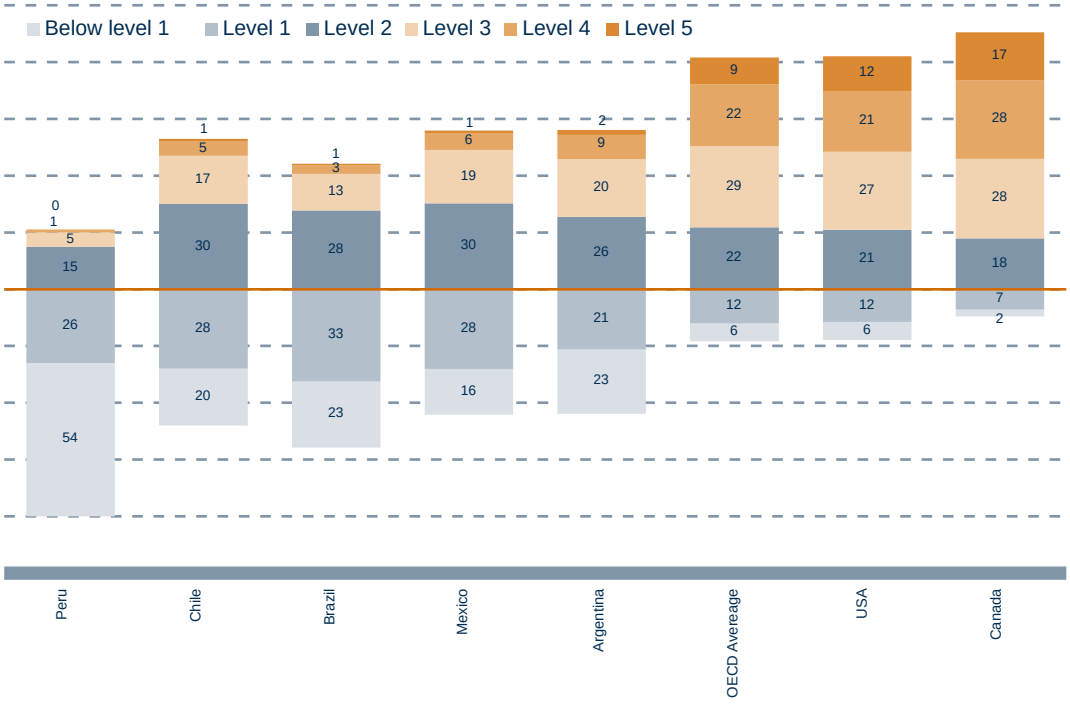
Figure 23 shows the distribution of students according to performance levels. We see here that Canada and the USA have a student distribution concentrated in levels 3 and 4. In the rest of the countries, students are mainly at levels 1 and 2, except for Peru, in which students are concentrated in lower levels (at and below 1). This means that most students in Canada and the USA are able to carry out more complex reading tasks than most students in the rest of the countries.

Upon comparing the performance of countries in the hemisphere, we see that, the percentage of students at level 1 ranges from 7% in Canada to 33% in Brazil, and that, with the exception of the USA, all countries have between 20% and 30% of their students at this level – much higher than the OECD countries (12%).

In addition, when we compare level 5, we see that for the group of OECD countries, 10% of students attain this level. Within the region, this varies from 0% in Peru to 17% in Canada. Again, only the USA is above the OECD average, while the rest of the countries practically do not have students at this performance level (1% in Brazil, Chile, and Mexico, and 2% in Argentina).

FIGURE 23 DISTRIBUTION OF STUDENTS BY PERFORMANCE LEVEL, COMBINED READING (PISA 2000)

Fuente: PISA (2003) Véase anexo de datos.



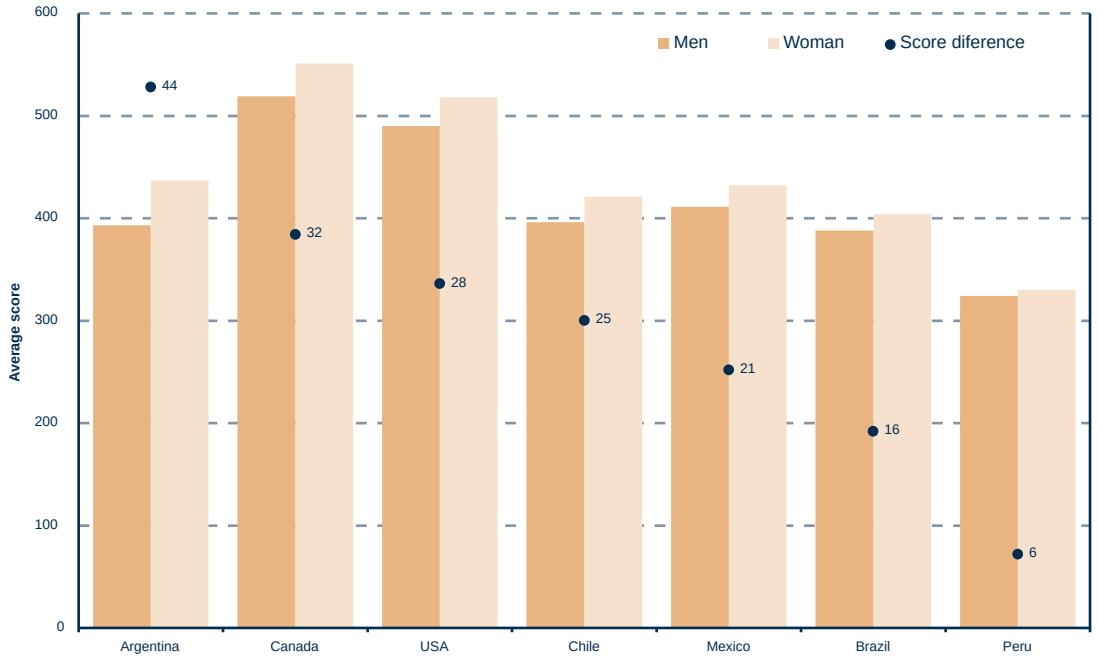
The results also show that in all countries, girls, on average, have higher reading scores than boys.

30 See PISA (2003) Literacy Skills for the World of Tomorrow – further results from PISA 2000.

DIFFERENCES IN COMBINED READING SCORES, BY GENDER. PISA 2000

FIGURE 24

Source: PISA (2003) See data appendix.



In effect, in the region, the greatest gender differences are found in Argentina and in Canada, where the differences are by 44 and 32 points, respectively, in favor of girls. That is, in these countries girls are, on average, one-half of a performance level above that of boys. In Mexico, Chile, and the USA, the differences range between 21 and 28 points, with Peru recording the smallest differences between girls and boys (7 points).

These gender differences are related to differences in reading habits. For example, in the set of participating countries, 58% of males and only 33% of females report that they read only to obtain information that they need. At the same time, 49% of females and only 30% of males report spending at least 30 minutes per day to read for pleasure.

The PISA results confirm the existence of a positive relationship between social and economic levels and test results. Those students from families with better social and economic conditions in general present better test results. However, social and economic levels do not completely determine student test results. There is in fact a significant dispersion of points. This shows that, at all social and economic levels there are students who have high and low scores.

International evidence shows that students who spend more time reading for pleasure read a greater variety of material and show a more positive attitude toward reading, and tend to be better readers, independent of their family conditions and the level of wealth of their countries.

METHODOLOGICAL NOTE

This note presents in detail the way this report has approached measurement of the goal regarding access to and completion of quality secondary education. It covers the selection of information and indicators, the reasons for such selection, and indicates the scope of the information used.

On the measurement of access to and completion of secondary education

According to the methodological considerations presented here regarding the measurement of the goals for primary education, it is clear that the best way to measure the access of young people to secondary education is the use of net enrollment rates at this level.

In effect, these rates show the proportion of young people of the age to be in secondary school (according to the age officially established for this purpose) who actually are doing so. Note, however, that those individuals who are not enrolled in secondary education are not necessarily outside the educational system, since they may be studying at another level (such as primary school if they are "behind", or at a higher level if they are "advanced").

This report uses these net rates as a direct measure of access to secondary education of young people in the age group officially defined for this purpose to be at this level of schooling.

On the other hand, in order to measure completion of secondary studies, PRIE adopted the use of information on the number of years of schooling achieved by the population 19-24 years of age, taking into account the considerations in regard to the same measure for primary education. This should be expressed in terms of the standardized education levels (ISCED 97).

Unfortunately, currently available information (ECLAC, Social Panorama of Latin America) is organized by years of study achieved, and not by ISCED levels. Also, it refers to the 15-24 year age group, and not the age range adopted by PRIE. Therefore, this information only allows us to measure the proportion of young people who have achieved at least 10 years of education (typically, 1 or 2 years more than that which corresponds to lower secondary, and 1 or 2 years less than that which corresponds to upper secondary). Using the next available category (13 years of education or more) would typically refer to having concluded 1 or 2 years of post-secondary education. This would introduce difficulties in measurement, and therefore has not been used.

In spite of these limitations, PRIE believes that this is the best information available for directly measuring, although only approximately, the completion of a given level of schooling.

On measuring the quality of secondary education

The Program for International Student Assessment (PISA) is a joint effort among countries to establish to what degree young people 15 years of age who are near the end of their compulsory schooling are prepared to face the challenges of contemporary society.

PISA was administered between 2000-2001 in 43 countries: the 28 member countries of the OECD[31] as well as Albania, Argentina, Brazil, Bulgaria, Chile, Hong Kong, Indonesia, Israel, Latvia, Liechtenstein, Macedonia, Peru, Romania, the Russian Federation, and Thailand.[32]

[31] The member countries of the OECD are Australia, Austria, Belgium, Canada, the Czech Republic, Denmark, Finland, France, Germany, Greece, Holland, Hungary, Ireland, Iceland, Italy, the Republic of Korea, Japan, Luxemburg, Mexico, New Zealand, Norway, Poland, Portugal, Spain, Sweden, Switzerland, the United States, and the United Kingdom. However, Holland did not comply with the participation rates required; therefore its results are not included.

[32] Romania did not have its data in time; therefore, its results are not available.

The evaluation measures skills and knowledge in reading, mathematics, and science of students 15 years of age. The purpose is to measure skills that are understood to be essential for individuals in the future and which are necessary for successful adaptation to a changing world.

PISA was designed to be administered 3 times. The first exam, in 2000-2001, placed emphasis on reading, while future applications in 2003 and 2006 will emphasize mathematics and science, respectively.

This report has used the results from the first application corresponding to reading skills.

In PISA, the concept of reading has three dimensions: type of task; form and structure of reading material; and use for which the text was constructed. The first of these best reveals the concept of personal skills. The type of task is measured on three scales: information extraction, which reports on the skills of students to locate information in a text; text interpretation, which measures the ability to construct meanings and form conclusions from written information; and reflection, which measures the ability of students to relate texts based on their own knowledge, ideas, and experiences. The combined scale summarizes the results of these 3 scales.

Performance levels

In order to facilitate interpretation of the results, PISA established 5 performance levels for reading. These levels are associated with certain processes and tasks with different degrees of difficulty. In order to carry out a specific task in reading, the difficulty of the task for students ranges from the simplest (Level 1) to the most complex, diverse, and difficult (Level 5).

Below Level 1: Students who are at this level are not able to carry out the most basic tasks that PISA seeks to measure. This does not mean that they are illiterate. These students have serious difficulties in using reading as an effective tool for advancing and extending their knowledge in other areas.

Level 1: Students who are at this level are able only to complete the less complex tasks developed by PISA, such as identifying a single unit of information, identifying the principal theme of a text, or making simple connections with every-day knowledge.

Level 2: Students who are at this level are able to carry out basic tasks such as locating direct information, making inferences of low difficulty, finding the meaning of defined parts of a text, and using some knowledge to understand the text.

Level 3: Students at this level are able to carry out moderately complex tasks, such as locating various units of information, associating different parts of a text, and relating texts with knowledge with which they are familiar.

Level 4: Students at this level are able to carry out more complex tasks, such as locating hidden information, constructing meaning from subtleties of language, and critically assessing a text.

Level 5: Students who are at this level are able to complete sophisticated reading tasks. They can manage information that is presented in texts with which they are not familiar. They can also show detailed understanding of complex texts, deduce what information is relevant for a task, and critically assess and establish hypotheses with the ability to use specialized knowledge and concepts that may be contrary to expectations.

C. THIRD GOAL:

LIFELONG LEARNING OPPORTUNITIES

This goal looks at education as a permanent activity in the lives of human beings. In effect, from a traditional notion that identifies the educational experience with formal instruction in schools, we have increasingly gone to a more comprehensive view of education that is based upon the concept that human beings are, first and foremost, beings who learn.

Thus, the concept of life-long learning is a recognition of a fact inherent to the human condition which society should assure and guarantee.

According to the Delors report, "no one can expect today that the initial stock of knowledge developed during youth is sufficient for one's entire life. For the rapid development of the world, demands a permanent updating of knowledge".[33]

It is in this spirit that the report speaks of concepts such as the educating society and permanent education. The educating society is one in which all opportunities should be used for learning and for the development of individual abilities. For its part, permanent education should go beyond the activities of professional leveling, skill enhancement, and promotion.[34]

On the other hand, Torres[35] suggest that the developed countries have utilized this as a key factor within the context of globalization and of the knowledge society of the XXI century. However, for the developing countries, this organizing principle means basic education. Therefore, although the words are the same, "life-long education" has a different meaning in different parts of the world.

In the industrialized countries, there is broad coverage of formal education which, in some cases, includes higher education. For example, in the U.S.A. as well as in Canada, nearly 40% of the population between 25 and 64 years of age possess some kind of higher education, and only 5% have only a primary education.[36] The young people and adults of these countries, within the framework of "lifelong education", tend to have a broad offer of non-formal education. In general, this type of education is organized into two modalities: one designed for the labor market, and the other for personal development.[37]

In the United States, for example, "lifelong learning" programs are not divided only into these two groups. Some of them are also in remedial education, aimed principally at immigrants whose native language is not English.

In addition, in the area of education for work, programs are not only for job training. There are also skill enhancement programs for professional young people and adults. Moreover, in the area of technology and distance education there are programs that support the use of new technologies in the workplace.[38]

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33 Delors, J., et.al. (1996) Learning: a Treasure Within, UNESCO.

34 Ibid.

35 Torres, R.M. (2002) Lifelong Learning in the North, Education for All in the South in Integrating Lifelong Learning Perspectives. UNESCO Institute for Education.

36 OECD (2002) Education at a Glance

37 Romijn C. (2002) Combining the World of Work with the Word of Education. In Integrating Lifelong Learning Perspectives. UNESCO Institute for Education.

38 http://www.ed.gov

The United States also possesses a range of personal development programs such as literary or cultural criticism and recreational activities. Public buildings such as libraries are used as places in which to offer guidance to young people and adults on how to access continuing and higher education programs, understand financial planning and investment, raise a family, exercise rights as a citizen, as well as courses on the internet and computers.[39]

In developing countries, however, current coverage does not assure universal coverage of basic education, in some countries not even primary education. The picture is even more complex for young people and adults, given that the increase of coverage of primary education is a recent phenomenon. Therefore, in these countries, "lifelong education" carries the connotation of being remedial and compensatory, and often of even being of lower quality than formal education.

For example, most countries in the region have, in parallel with their formal education systems, a system of remedial education which ends up absorbing not only young people and adults who have not had educational opportunities, but also school-age children who are behind in grade or need to work during regular school hours.

There are also job training programs which, in general, are part of remedial education. This corroborates the thesis of Torres that "lifelong education," still with a job training character, tends to be identified with basic education programs for overage students and adults from lower socioeconomic strata.

When we add to the above the fact that providers of these educational services are diverse and of different institutional natures, as diverse as the educational programs offered, and that there is no systematic source of information on these activities, this goal shows itself to be particularly complex and difficult to assess. Moreover, the goal does not refer exclusively to the provision of education programs for young people and adults, whether meant to fill needs not treated in a timely fashion (such as literacy training programs) or for job training. It also refers to opportunities for personal development for those who have already achieved significant levels of formal education.

[39] http://nces.ed.gov/pubsearch/pubsinfo

chapter 2

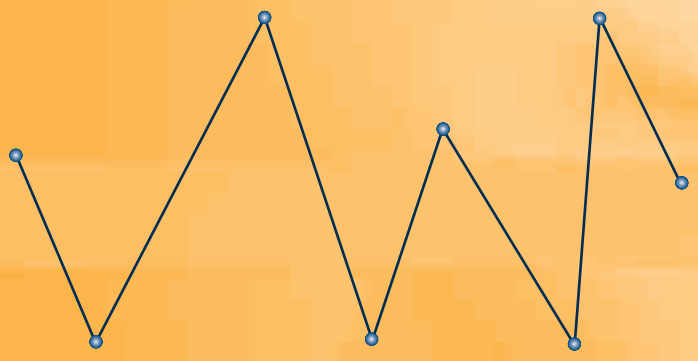
WHY IS IT IMPORTANT TO ACHIEVE THESE GOALS? [40]

The fulfillment of the goals proposed in 1998 during the Summit of the Americas is not only a political commitment assumed by the Heads of State of each country. It should also be a responsibility shared by all members of society. This responsibility falls upon all of us, whether directly involved with education systems or not. That is, it is not only of interest to educators, students, and parents.

The above argument is based on the fact that higher and better levels of education of the population not only benefit those who receive them; they also benefit society as a whole. Therefore, it will be useful to consider the goals in the light of the impact that they have on different parts of society; or put in other terms, of their ability to effectively provide greater social well-being.

Thus, we may conclude that achieving universal primary education, assuring that 75% of young people have access to secondary education, and offering life-long educational opportunities are not only objectives in themselves. They are also means to attain other desirable social objectives, such as increased income, greater economic development, better income distribution, greater citizen participation in political decision-making, consolidation of democratic norms and values, among others. Therefore, it is essential that we review the evidence available for the region in order to gauge the social impact of education.

The principal objective of this chapter is to establish a framework for the debate on the social impact of education. This framework is developed from the perspective of PRIE; that is, serving the need of having a set of internationally comparable indicators that allow us to understand the economic, social, and political impact of education.



40 This chapter makes use of the experience of PRIE in this subject, particularly that of Carlos Muñoz Izquierdo, ed.al. (2003) Desarrollo de una propuesta de indicadores del impacto de la educación en América Latina y el Caribe developed by a team from the Universidad Iberoamericana de México under the direction of Carlos Muñoz Izquierdo. This study was developed at the request of PRIE, and may be found at http://www.prie.cl

A. ANALYTIC MODEL[41]

It is not easy to gauge the impact of education on society and on the quality of life of each of its members. It is not a clearly identifiable phenomenon, but rather a complex and multidimensional process upon which a number of variables act simultaneously.

Moreover, the social impact of education is neither linear nor constant, since its magnitude and manifestations depend upon a large number of factors. One fundamental element is the quality of education imparted. That is, the benefits and results obtained through greater education will depend, on the one hand, on the relevance and pertinence of the content imparted and, on the other, on the efficiency and equity of the education system. For this reason, it is necessary to reflect upon what is understood by the "quality of education" since this, after all, is an explicit objective among the goals of the Summit of the Americas.

1. THE QUALITY OF EDUCATION[42]

The quality of education is a normative and multifaceted concept because, intervening in its definition are, in the least, dimensions involving philosophy, pedagogy, culture, society, and economics.

In effect, from a philosophical perspective, education has quality when the objectives proposed in curricula are based upon and directed toward fostering the values that different sectors of society consider desirable. In order to assess fulfillment of this condition, one applies criteria that are known by the term relevance.

From a pedagogical perspective, education has quality when the various objectives proposed in the curricula, plans, and education programs are achieved. Assessment of this condition is carried out through the criterion of efficacy.

From a cultural perspective, education has quality when its contents and methods stem from the conditions, possibilities, and aspirations of each of the social groups toward which it is directed. One assesses the fulfillment of this condition by applying the criterion of pertinence.

From a social point of view, education has quality when the opportunities to receive it (as well as to participate in the social benefits derived from it) are distributed equally among different sectors of society. From this perspective, assessment is carried out through the application of the criterion of equity.

Finally, in the area of economics, education has quality when the resources used to impart it are utilized in the best manner possible, and upon doing so, the existing relationship between benefits derived and costs sustained are optimized. To assess the fulfillment of this condition, one applies the criterion of efficiency.

In summary, education is considered to have quality when it is directed at satisfying the aspirations of all sectors of the society. Also if, upon doing so, it effectively achieves the goals that it seeks. And, if it is generated through culturally pertinent processes, making optimum use of the resources necessary to impart it, assuring that the opportunities to receive it, and the social and economic benefits derived there from, are distributed in an equitable manner among the different sectors of the society.

41 Based on Carlos Muñoz Izquierdo, ed.al. (2003) Desarrollo de una propuesta de indicadores del impacto de la educación en América Latina y el Caribe

42 Taken from Carlos Muñoz Izquierdo, ed.al. (2003) Desarrollo de una propuesta de indicadores del impacto de la educación en América Latina y el Caribe

2. INTRINSIC AND EXTRINSIC DIMENSIONS OF THE QUALITY OF EDUCATION[43]

In assessing the quality of education, it is necessary to keep in mind that the outcomes of education systems manifest themselves in two directions – one intrinsic, and the other extrinsic to the education system. The first dimension refers to that which is inherent to the education system – knowledge, skills, attitudes, values, and all other objectives contained in the respective plans and programs of studies imparted within schools. The second dimension refers to the impact that these results produce within the society in which the education system operates. That is, once these individuals who possess greater human capital enter society, they generate impacts that are at the same time economic, social, and political.

In order to express operationally the intrinsic dimension of the outcomes of education systems, it is necessary to resort to the sciences of education. Moreover, in order to analyze the extrinsic dimension, it is necessary to resort to knowledge generated in various areas of the social sciences, since this dimension refers to the extent to which education fulfills the various functions assigned to the various levels and modalities within which it is imparted.

Thus, for example, the intrinsic dimension of the efficiency of education systems may be estimated by examining rationality in the use of the resources assigned to education (cost effectiveness). For its part, the extrinsic dimension of these outcomes refers to the optimization of costs and benefits created by education. This dimension is assessed, then, through application of cost/benefit analysis, considering the impact that the knowledge acquired by students has on the productivity of economic systems and on the employability and income of those who acquire it.

For its part, the intrinsic dimension of efficacy refers to the extent to which the above-mentioned curricular objectives are attained. The extrinsic dimension of efficacy is related to the capacity of the knowledge, skills, and values acquired by people to improve their own quality of life.

In addition, the intrinsic dimension of equity may be gauged through analysis of the distribution of education opportunities, while the extrinsic dimension of this criterion is gauged through the effects that learning has on the distribution of income, social mobility, and, in general, on the distribution of social opportunities.

Thus, the social impact of education is placed on the extrinsic dimension of the education system, defined as the impact that knowledge, skills, and values have on society and its members.

43 Taken from Carlos Muñoz Izquierdo, ed.al. (2003) Desarrollo de una propuesta de indicadores del impacto de la educación en América Latina y el Caribe.

3. AREAS OF THE SOCIAL IMPACT OF EDUCATION

We shall present below a summary of the relations that the available literature has identified between education and each social area that it affects. The following section offers empirical evidence regarding these relations in the case of the Americas.

3.1. IMPACT IN THE ECONOMIC AREA

The growing necessity to explain and predict the economic benefits of increasing the education level of the population has led to the appearance of a number of theories which approach the theme from different perspectives.

3.1.1. The individual and family level

Human capital theory seeks to explain salary differences existing within an economy. It postulates that these differences are due to the different productivity of workers; that is, to different abilities to generate goods and services. For its part, this productivity is produced by the accumulation of human capital, defined as the knowledge and skills acquired by workers through education, training, and experience.

Based upon the above, education is viewed as an investment, the returns to it are manifested by higher salaries, which in turn allows us to conclude that the investment in human capital is a profitable and attractive alternative.[44]

It has been shown that education makes it possible to increase the probability of obtaining quality employment, seek higher salaries, and increase the quality of members of the household who participate in the labor market. These elements contribute to integration of families into the labor market and into society.

For its part, the relationship between education and poverty has been analyzed in a number of studies.They demonstrate that the probability of being among the poorest sectors or of escaping from poverty varies according to level of education achieved.[45]

3.1.2. The level of the community

Education increases the productivity of workers, which not only translates into higher salaries, but in greater economic growth as well. [46]

However, the greatest contribution that education makes to economic growth comes not only from the increase in productivity of the labor force, but also from the ability of education to encourage technological changes and improvements in the economy. It is in this area where education and scientific research appear to be fundamental for economic growth. Education not only encourages innovation and facilitates the incorporation of new technologies into the productive process of each industry; it also generates positive externalities for the rest of the economy. That is, if the innovations developed enter into the storehouse of knowledge of society, so that everyone can benefit from them and use them, one generates a social benefit greater than the private benefit obtained by the person who is educated or by the industry that produces the innovation.[47]

The implication of this is that “ideas” are a “unending source” of economic growth. For this reason, higher education, and especially doctoral programs, play a fundamental role, since it is at these levels of education where it is possible to expand the frontiers of knowledge.

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44 This can be seen in OECD, (2002), Education at a Glance, which analyzes member countries of this organization and concludes that in the majority of them, the rate of return to tertiary education is in the range of 10%-15% above the real interest rate. The return to education is compared with the real interest rate, since the latter represents the alternative cost of the funds invested. If the return (benefit) is greater than the alternative (cost), then the “project” is profitable.

45 Juan Guillermo Espinosa (2001), Economia Neoliberal vs. Economia Social en América Latina, p. 184.

46 Evidence of this may be found in the study of Nonnenman and Vanhoudt (1996) Educational Attainment in the OECD, which affirms the important effect of human capital on economic growth rates.

47 In this sense, Nonnenman and Vanhoudt (1996) in A further augmentation of the solow model and the empirics of economic growth for OECD countries confirm the importance of research as a determinant of economic growth. In doing so, they use indicators of spening on research and development as a percentage of GDP.

3.2. IMPACT IN THE SOCIAL POLITICAL AREAS

3.2.1. Social Capital

Education not only makes people more productive; it also reproduces values and norms that allow people to live better in community. In this way, human capital contributes to the construction of social capital.[48]

A number of researchers argue that the creation of social capital is fundamental for overcoming poverty, since it strengthens the ability of people to help each other and themselves and to overcome difficulties together.

For its part, greater levels of social capital facilitate the acquisition of greater levels of human capital, whether by providing a proper environment for learning, or for placing at the disposition of society financial and material resources that would otherwise not be available.

3.2.2. Intergenerational educational mobility

The educational level of parents strongly influences the quality and quantity of education acquired by their children. For this reason, there is a synergy in educational mobility at the intergenerational level. This can work against new generations, when the educational level of their parents is low.

On the other hand, once a high level of education is achieved, this level tends to perpetuate itself and to be transmitted to the following generation.

3.2.3. Strengthening of democratic institutions

Education contributes to values training and in the development of student attitudes. It can play a role in the reproduction of values and in the creation of attitudes that contribute to the strengthening of democratic institutions.

Research that studies the link between schooling and political culture distinguishes at least three dimensions in which education contributes to the creation of a democratic and participatory political culture: the cognitive, the affective, and the evaluative. The first of these dimensions refers to knowledge and concepts related to the functioning of the political system. The second refers to attitudes in the face of particular stimuli and the identification of individuals with particular institutions. Finally, the third dimension refers to the critical ability that individuals have to assess different dimensions of politics, such as the functioning of the system, the behavior of political parties, and public policies in general.

3.2.4. Fertility and birth rates

Fertility decreases when the level of schooling of women increases. Evidence shows that, the probability of entering the labor market under favorable conditions, induces women to have fewer children.

Schooling also induces women to delay the time when they begin their reproductive life, which also results in a decrease in their fertility.

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[48] Although there is no single definition for this concept, it may be summarized as a "network of human relations or set of shared values and norms that facilitate cooperation among the members of a community" OECD (2001) Well-being of Nations.

3.2.5. Infant mortality and prevention

When mothers have a higher level of education (especially beginning with secondary schooling), they increase their abilities and their knowledge of how to care for the health of their children. This knowledge result in improved hygiene, nutrition, and encourages preventive medicine, among other impacts.

At the same income levels, infant mortality decreases when female schooling rates increase. It should be noted that the expansion of primary education produces a weaker effect than does the expansion of secondary education.[49]

Moreover, education is fundamental in the prevention of disease and in combating rapidly expanding epidemics and contagion. This fact is corroborated by the joint United Nations program on HIV/AIDS (ONUSIDA).[50]

3.3. EQUITY

Equity is a cross-cutting point of analysis. It is not only inherent to the economic area, but to the social and political spheres as well. Therefore, when analyzing the social impact of education, one should assess its contribution in constructing equality of opportunities.

Education allows people to develop their potential, increasing life's opportunities and possibilities. For example, in the economic sphere, education makes possible greater access to income generation.

Empirical evidence demonstrates that trained workers not only obtain greater income in absolute terms than untrained workers, but in relative terms as well, resulting in an increase in salary gaps.[51]

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49 McMahon (2000). The impact of human capital on non-market outcomes and feedback on economic development, cited in Carlos Muñoz Izquierdo et. al. (2003) Desarrollo de una propuesta de indicadores del impacto social de la educación en América Latina y el Caribe.

50 By analyzing existing publications on the theme, this program concludes that of 53 studies that assess the effect of sex education in schools, 27 do not find evidence either in favor or against this kind of education; 22 argue that such education programs decrease unplanned pregnancies and the number of infections of STDs. Only 3 studies find to the contrary. See www.jornada.unam.mx/2002/oct02/021003/ls-jovenes.htlm

51 In the United States in 1976, people with a higher education degree earned, on average, 55% more than those with only a secondary school diploma. Moreover, in 1994, people with a university degree earned 84% more than those people holding only a secondary education degree. Gregory Mankiw A(1998) Principios de Economia.

In addition, OECD studies show that, in countries such as Finland, Hungary, and Portugual, people with higher education earn up to 80% more than those with only a secondary education. OECD (2002) Education at a Glance.

1. IMPACT ON THE ECONOMY

1.1.IMPACT AT THE INDIVIDUAL AND FAMILY LEVELS

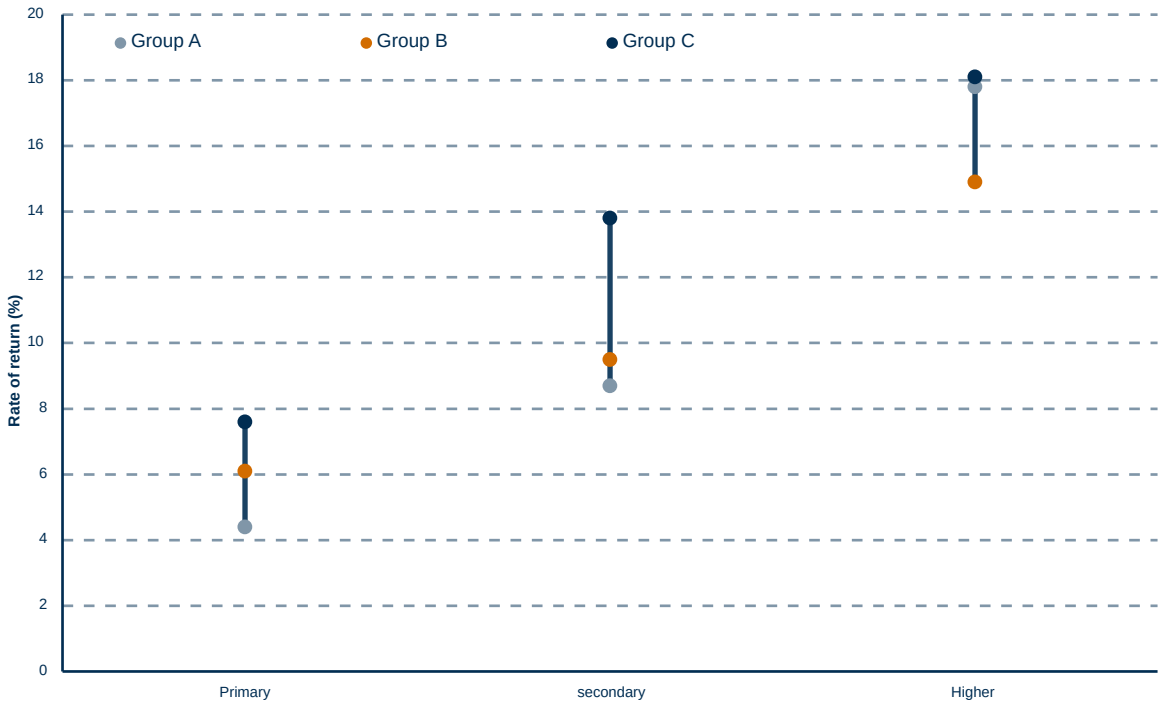
Rates of return to education are calculated by estimating the effect of each additional year of schooling on the income of an individual.[52]

Figure 25 shows the return to education in 16 Latin American countries, indicating the return of each additional year of schooling, by educational level. The analysis is carried out by groups of countries, depending on the average level of education of the Economically Active Population (EAP).[53] The groups correspond to countries whose EAP possesses high, medium, and low levels in regard to the average, respectively.[54]

FIGURE 25

RATE OF RETURN TO EDUCATION FOR MEN AND WOMEN, BY LEVEL OF EDUCATION BY GROUPS OF COUNTRIES (URBAN AREAS, CIRCA 1999)

Source: ECLAC (2002) See data appendix



52 Controlling for the effect of the potential experience of a person. Details on the methodology used may be consulted in ECLAC (2002) Social Panorama of Latin America.

53 Also considered for the organization of groups is the overall school drop-out rate. See details in ECLAC (2002) Social Panorama of Latin America.

54 Group A includes Argentina, Bolivia, Chile, Colombia, and Panamá. In Group B are Costa Rica, Ecuador, Mexico, Paraguay, Uruguay, and Venezuela. Grupe C includes Brazil, El Salvador, Guatemala, Honduras, and Nicaragua.

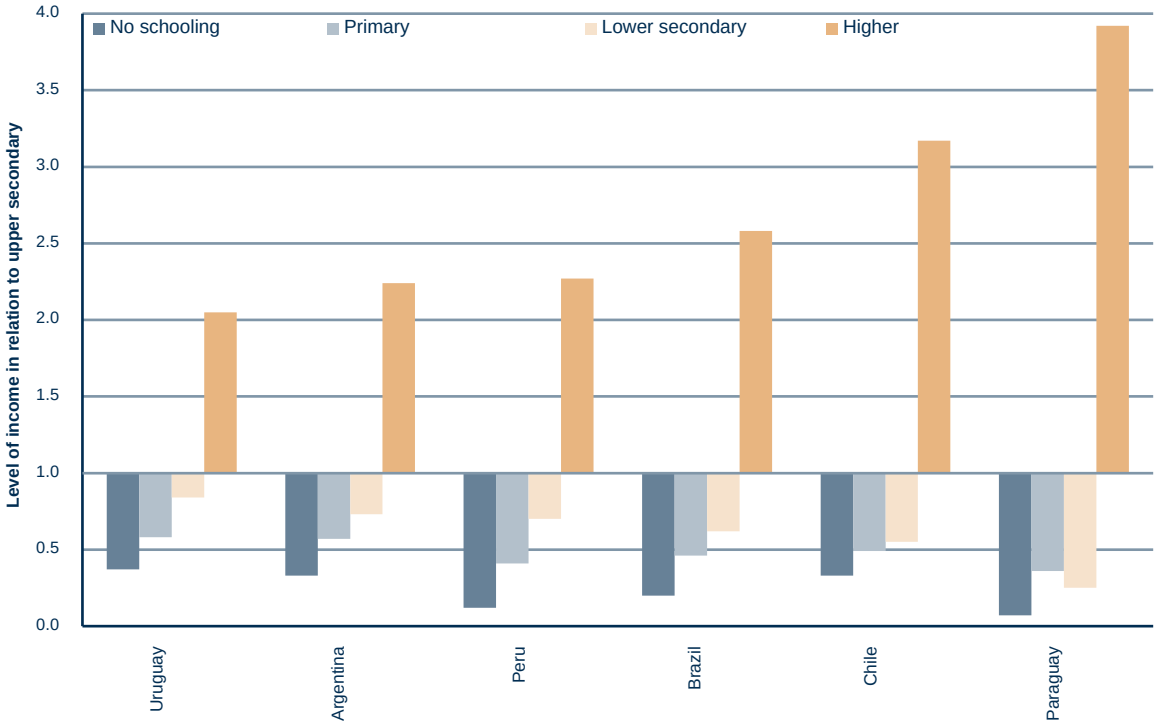
We may conclude from this information that, first, the returns to education increase according to advancement from one educational level to another. This has implications on the existence of differentiated salaries, since the greatest benefits of education are obtained with higher levels of schooling, exactly those to which the majority of the population do not have access.

Second, when the average level of education of the EAP increases, the return to education decreases for primary and secondary education. That is, the greater the number of people who enjoy a higher level of education, the lower is the "prize" for additional years of education at these levels. In this sense, the higher education level represents a special case since here the phenomenon is not clear.

An important element to be considered when analyzing the evidence is that the educational level of individuals may be better represented using information on years of education achieved expressed in terms of the levels of education completed. This is important in carrying out international comparisons. PRIE opts in all cases when possible, in favor of using the International Standardized Classification of Education (ISCED 1997),[55] which is defined in function of the contents of educational programs, and thus assuring equivalence in substantive terms.

FIGURE 26a INCOME DIFFERENTIALS BY EDUCATION LEVEL ATTAINED (MEN FROM 25-64 YEARS OF AGE, 1999)[56]

Source: UNESCO/OECD (2003). See data appendix.



55 UNESCO (1997) International Standardized Classification of Education.

56 Graphs 28a and 28b do not include information from the United States, Canada, and Mexico, since available information for these countries is classified in a different form than that used for the others. See the data appendix.

INCOME DIFFERENTIALS BY EDUCATION LEVEL ATTAINED (WOMEN FROM 25-64 YEARS OF AGE, 1999) FIGURE 26b

Source: UNESCO/OECD (2003). See data appendix.

Figure 26 presents evidence of the effect of education on salaries, utilizing ISCED 1997. Here we see income differential by educational level attained in comparative terms for people who have only concluded higher secondary education.[57]

This information corroborates the "premium" that the market grants to those who complete higher education. This effect is especially important in Paraguay, where men with higher education obtain salaries almost 4 times greater than those with only secondary education.

In this sense, men in the United States and in Canada have returns (relative to upper secondary education) that are lower for higher education than all of the countries in Latin America. In fact, the income differentials relative to upper secondary education are 1.9 and 1.6, respectively. This means that, while in Latin American countries, men with a higher education obtain income of at least two times that of those who have a secondary education, in the United States and Canada, this difference is less than two times as much. In the case of women, the evidence is similar to that of men, with the exception of Uruguay, which shows rates similar to those of the countries in the northern hemisphere. This would seem to reaffirm the evidence that, the more average years of education obtained by the population, the less is the return for additional years of schooling.

Education also has effects on incentives to participate in the labor market. Given that education increases the salary that a person is able to earn, the incentive to be economically active also increases. Therefore, the more education a person has, the greater the possibility that he or she will participate in the labor market.

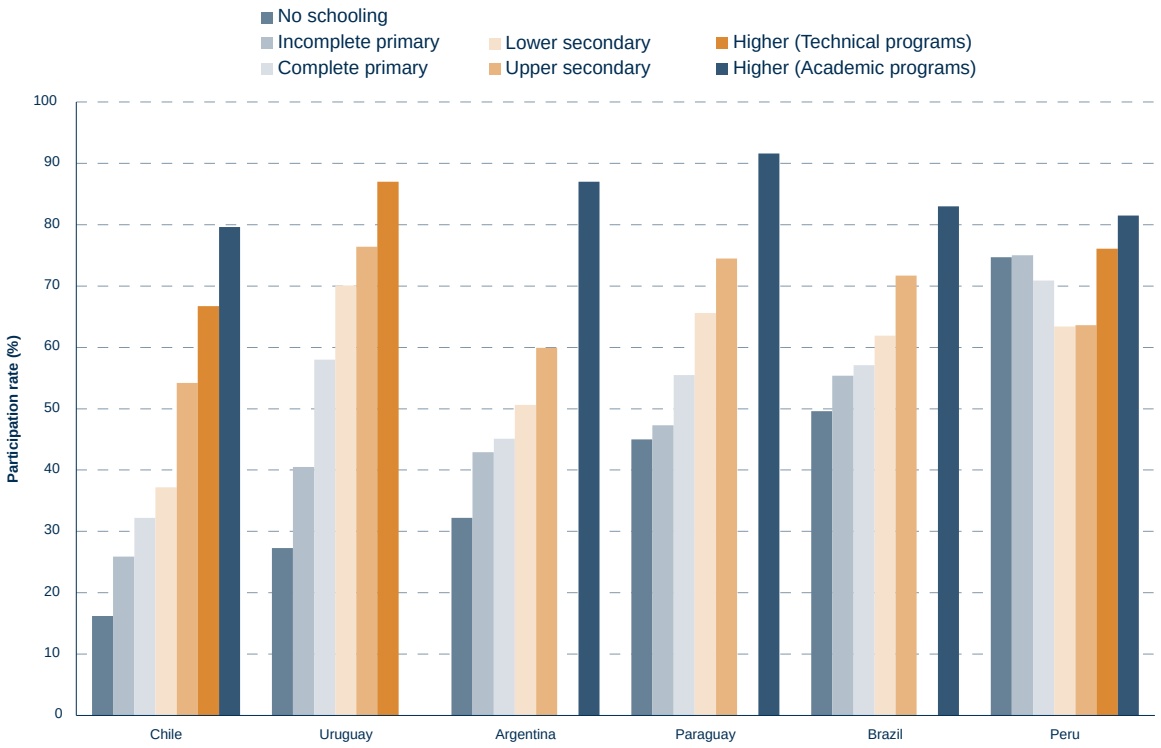
[57] For the effects of comparison, the values corresponding to upper secondary are equivalent to 1.

This effect is especially important for women, since their decision to participate in the labor market also has an impact on other variables, such as entry into the labor market of the spouse, the number of children, cultural considerations, etc. However, some women require an income relatively high to be able to compensate for the cost, for example, of paying a daycare. For this reason, the supply of women in the labor market is more sensitive to salary changes, and thus more sensitive to the level of education achieved.

The above may be verified by observing the evidence presented in Figure 27. This shows participation rates in the labor market for men and for women.

FIGURE 27a PARTICIPATION IN THE LABOR MARKET BY EDUCATION LEVEL ATTAINED (WOMEN 25-64 YEARS OF AGE, 1999)[58]

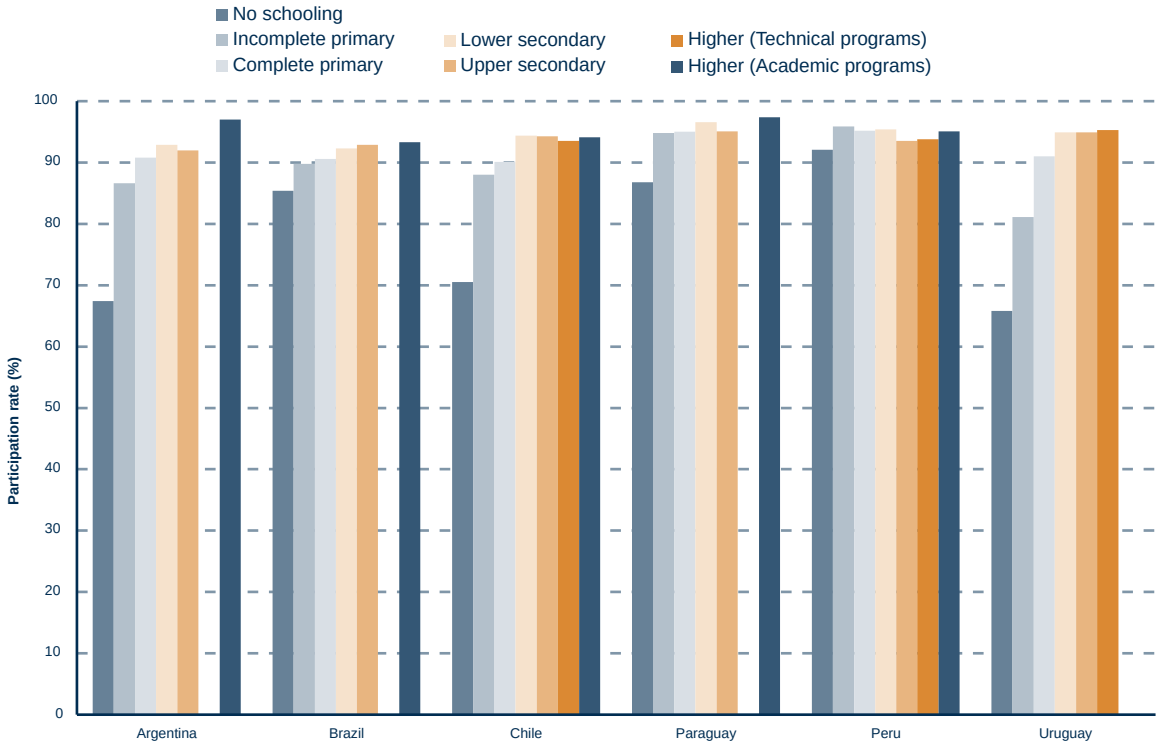
Source: UNESCO/OECD (2003).
See data appendix.



58 Figures 29a and 29b do not include information on the United States, Canada, and Mexico, since the information available for these countries is classified differently from that used for the others. See the data appendix.

PARTICIPATION IN THE LABOR MARKET BY EDUCATION LEVEL ATTAINED (MEN 25-64 YEARS OF AGE, 1999) FIGURA 27b

Source: UNESCO/OECD (2003).
See data appendix.



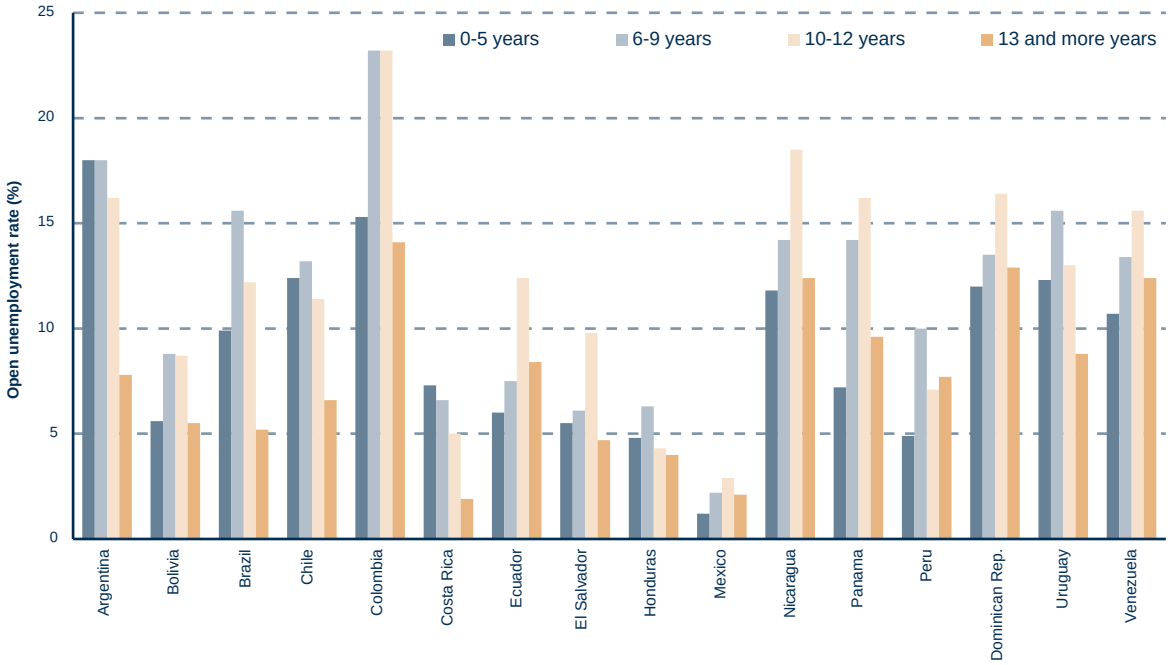
It can be seen that the greater the level of education, the higher the participation rate in the labor market, for both men and women. However, one notes in the case of women that this tendency is much more strong. An extreme case is that of Chile, where the probability that a women who has completed higher education to participate in the labor market is more than four times higher than that corresponding to those women who only have completed primary school (79.6% vs. 16.2%).

In Mexico, the participation in the labor market of women who have a higher education (academically oriented) is markedly less than that of other countries. While most countries show female labor participation rates of 80%, in Mexico this figure is 70%. Similarly, in the case of men, one sees a significant difference in labor participation rates observed in Latin American countries and those in the United States and Canada. While in the former, the labor participation rates of men with complete secondary or higher education (academically oriented) are above 92% and 93%, respectively, in the countries in the northern hemisphere, these rates are below 88% and 92%, respectively.

Finally, education also has an impact on the unemployment rate. Although one would expect to observe lower unemployment as the level of education of the individual increases, this relationship is not always found in reality.

FIGURE 28 OPEN UNEMPLOYMENT RATES, BY YEARS OF SCHOOLING ATTAINED (URBAN AREAS, CIRCA 2000)

Source: ECLAC (2000). See data appendix.



The evidence presented shows that the highest rates of unemployment are found among those individuals with medium levels of education, while people with low and high levels present lower unemployment rates. In general, however, one may state that with increasing years of schooling, beginning with 10 to 12 years of schooling, there is an inverse relationship between education and unemployment. In some cases, this is observed around 6 to 9 years of schooling.

This relationship may be due to the fact that the unemployment of individuals with medium levels of education is related to a greater search for employment compared to those without schooling. That is, the former prefer to seek employment during a longer period of time in order to find a better job, whereas those with little schooling simply accept the "first job" offered, since their options are more limited.

Another explanation stems from the existence of greater structural unemployment in certain levels of education – in this case, in the middle levels. That is, there may be a certain incompatibility between the skills that workers possess and those required by businesses.
In conclusion, greater levels of education increase the salary obtained in the labor market, increase the number of income earners within households (greater labor market participation), and diminish unemployment at the individual level. All of these elements contribute to helping families escape poverty.

In this sense, numerous studies show that in Latin America, a person with less than 5 years of education has an 80% probability of being in the 20% poorest sector of the population. On the other hand, a person with more than 13 years of education has only a 5% probability to be in the same income group.[59]

In addition, ECLAC has shown that completing the secondary level of education and having a minimum of 12 years of schooling assure, with more than an 80% probability, that a person will be above the poverty line.[60]

59 Juan Guillermo Espinosa (2001), Economía Neoliberal vs. Economía Social en América Latina, p. 184

60 ECLAC (1997) Social Panorama of Latin America.

PERCENTAGE OF THE POPULATION BELOW THE POBERTY LINE AND AVERAGE SCHOOLING OF THE POPULATION 25-59 YEARS OF AGE (URBAN AREAS, CIRCA 2000) FIGURE 29

Source: ECLAC (2000). See data appendix.

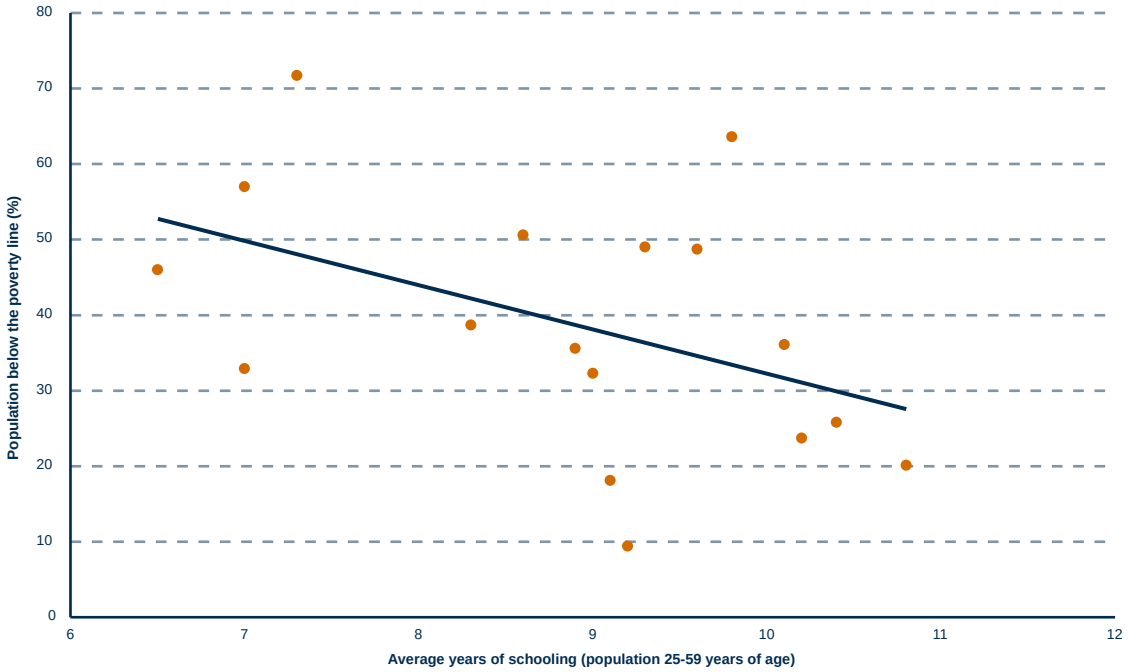


Figure 29 shows the relationship, in urban areas, between average years of schooling of the population 25 to 59 years of age and the percentage of households below the poverty line.

One sees a decreasing trend in the proportion of households below the poverty line, with the increase in the average schooling of the population.

PERCENTAGE OF THE POPULATION BELOW THE LINE OF EXTREME POVERTY AND AVERAGE SCHOOLING OF THE POPULATION 25-59 YEARS OF AGE (URBAN AREAS, CIRCA 2000) FIGURA 30

Source: ECLAC (2000). See data appendix.

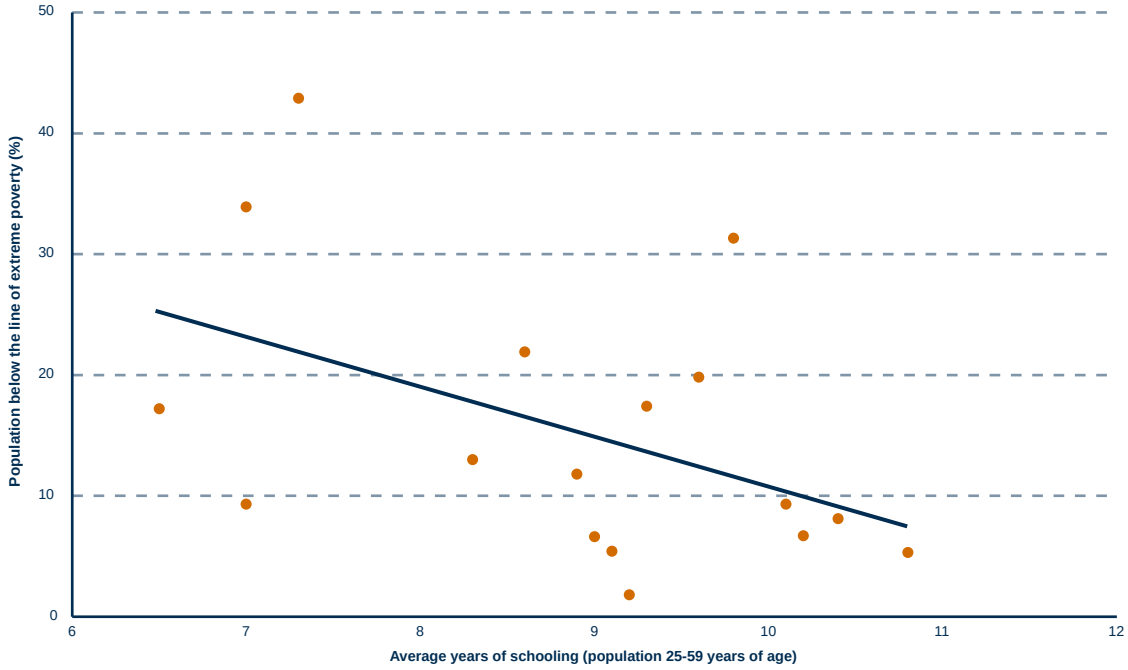


Figure 30 shows the relationship, in urban areas, between the percentage of households in extreme poverty and the average level of schooling of the population 25 to 59 years of age. Note that higher levels of education are related to smaller proportions of extreme poverty households.

In both cases, these are not strong relationships, which indicates that poverty and extreme poverty are also associated with other factors. Thus, it is not enough to increase the average schooling level of the population in order to eradicate poverty and extreme poverty. It is necessary to strengthen the quality of social policies aimed at improving entry into the labor market and into society for underprivileged groups.

It is also important to keep in mind that, in spite of the population having more years of schooling, the quality of education received by different sectors of society is not uniform, and is inequitable in many cases. This limits the ability of education to be a tool to eradicate poverty.

1.2. IMPACT AT THE COMMUNITY LEVEL

A recent study[61] carried out by countries who are part of the World Education Indicators Project (WEI),[62] analyzes the relationship between human capital and economic growth for a period of two decades (1970-1980 and 1980-1990).[63]

This study confirms the strong relationship existing between human capital and economic growth. In the WEI countries, the increase in human capital provided, on average, one-half of a percentage point in annual growth rates during the two decades analyzed.[64] This means, for example, if the economy of a country grows by 3.0% annually during a period, 0.5% was generated by the increase in education and 2.5% by other factors such as investment in physical capital, expansion of foreign trade, etc.

The evidence is even stronger for the sub-set of countries of the region that participated in WEI. For all, without exception, the contribution of human capital to economic growth rates was above 0.5%. This impact is especially strong in the cases of Argentina, Chile, Jamaica, Peru, and Paraguay.

In summary, one may conclude that investment in human capital has high social profitability in the long run. The increase in the productivity of workers, greater innovation, the capacity to assimilate better production technologies, and other positive externalities are determinant in the generation of high rates of economic growth which, finally, results in greater social well-being and a better quality of life for the population.

2. IMPACT ON SOCIETY AND POLITICS

Following, we present empirical evidence for the Americas that reflects the influence of education on intergenerational educational mobility, the strengthening of democratic institutions, fertility, birth rates, and infant mortality.

It is worth noting that it is difficult to present empirical evidence on the relation between human and social capital, due to the methodological difficulty involved. Social capital is a concept that has to do with the intensity and specific characteristics of the networks formed and contacts existing within communities. There is currently no extensive survey of this type of information in the region. This makes comparison difficult between some existing initiatives to measure this social phenomenon.

2.1. INTERGENERATIONAL EDUCATION MOBILITY

The education of parents is determinant in the educational level achieved by their children. This intergenerational relationship is shown in Figure 31, where we can see the proportion of children from 20 to 24 years of age who attain at least 12 years of education, by the education levels of their parents.

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61 UNESCO/OECD (2003) Financing Education- Investment and Returns.

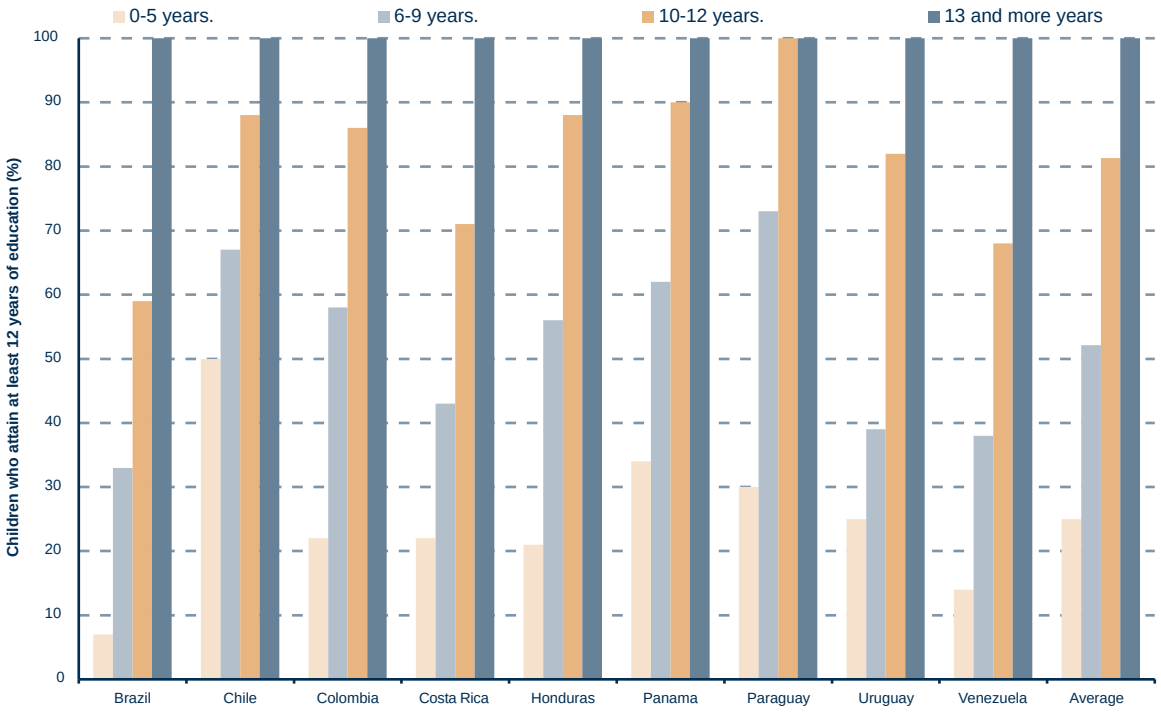
62 The countries of the region that participate in the project WEI (World Education Indicators) are: Argentina, Brazil, Chile, Jamaica, Paraguay, Peru, and Uruguay. The WEI project brings together 19 medium income countries, which account for approximately 70% of the world population.

63 It uses, to the extent possible, information from primary sources, collected directly through national census studies and/or WEI project questionnaires. In addition, it uses as an indicator of human capital the average number of years of education for the population 15 to 64 years of age.

64 UNESCO/OCDE (2003) Financing Education- Investment and Returns. p 21-33.

PROPORTION OF CHILDREN FROM 20-24 YEARS OF AGE WHO ATTAIN AT LEAST 12 YEARS OF EDUCATION, BY THE EDUCATION LEVELS OF THEIR PARENTS (URBAN AREAS, CIRCA 1994) FIGURE 31

Source: ECLAC (1997). See data appendix.



We can see that the greater the educational level of parents, the greater the proportion of children who attain 12 years of schooling. This pattern is observed in each of the nine countries for which information is available. The most extreme situation is seen in Brazil, where only 7% of the children of parents with 0 to 5 years of schooling completed at least 12 years of study. At the same time, in Brazil, all of the children of parents with 13 or more years of education attained at least 12 years of education. That is, the educational gap between parents has an impact on current generations, perpetuating educational inequalities.

It is important that the educational system reverses these trends and diminishes the impact that the education level of parents has on their children in low education households. In this sense, Chile shows the smallest gap for children of parents at different education levels, in spite of presenting high levels of inequality.

2.2. STRENGTHENING DEMOCRATIC INSTITUTIONS

In order to gauge the impact of education on the creation of a democratic and participatory political culture, numerous studies resort to the use of opinion surveys. Through these, they construct different indicators that are linked to the issue of governability.

In effect, in order to measure governability, scales have been constructed that bring together information regarding the dimensions of freedom of expression and its impact on public policies, political instability and violence, government effectiveness, regulatory excess, applicability of the law, and corruption.[65]

[65] Kaufmann, Kraay y Zoido-Lobaton (1999). "Aggregating Governance Indicators" World Bank, citado en Carlos Muñoz Izquierdo et. al. (2002) Desarrollo de una propuesta de indicadores del impacto social de la educación en América Latina y el Caribe. pg 26.

Information on the Americas shows that the phenomena observed ratify the hypotheses advanced. In effect, the indicators of electoral participation, freedom of expression, and their impact on public policies, political instability and violence, applicability of the law, and corruption vary according to levels of schooling of the adult population, both in countries that have higher levels of schooling and in those which have lower levels.[66]

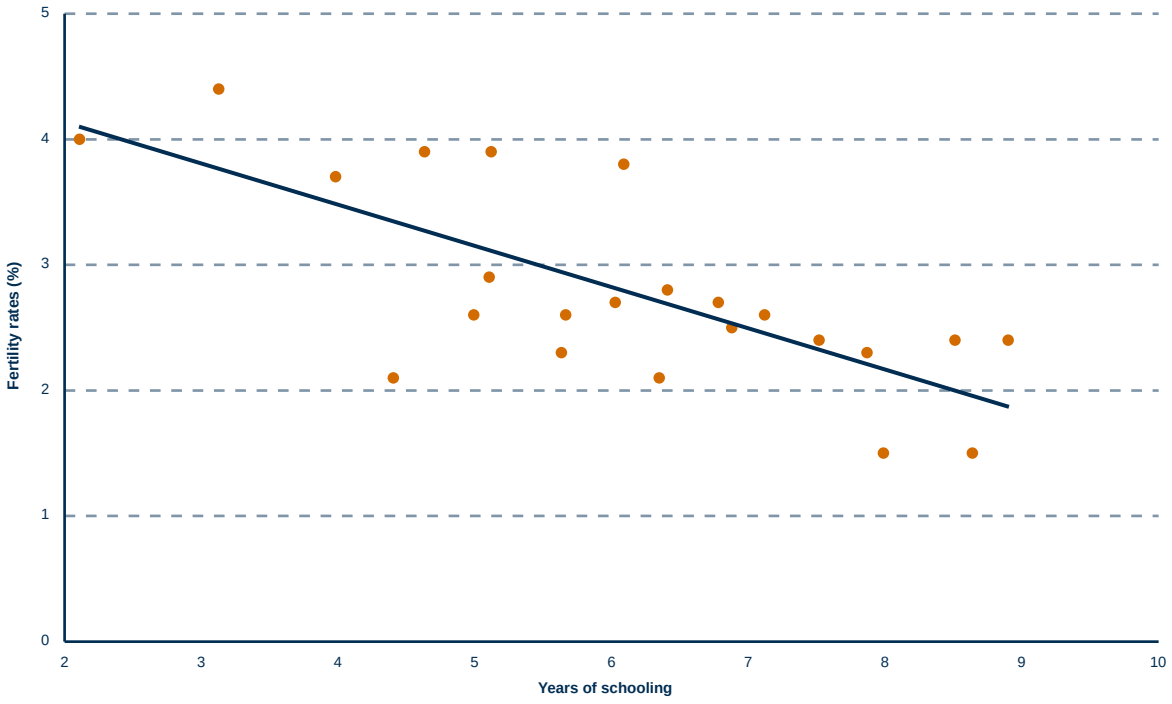
2.3. FERTILITY AND BIRTH RATES

Figure 32 shows the relationship between years of schooling of the female population over 15 years of age, and fertility rates. We note the existence of an inverse relation between these variables. This shows the influence of years of schooling on the number of children a woman has.

Fertility rates show the number of children that on average a woman has during her fertile period. This varies between 4 in Haiti, where the female population has on average 2.1 years of schooling, and 1.5 in Barbados and Trinidad and Tobago, where the female population has on average 8.6 and 7.9 years of schooling, respectively.

FIGURE 32 FERTILITY RATES (2000-20005) AND AVERAGE SCHOOLING OF THE FEMALE POPULATION OVER 15 YEARS OF AGE

Source: ECLAC estimates (2000) and Barro and Lee (2000).
See data appendix.



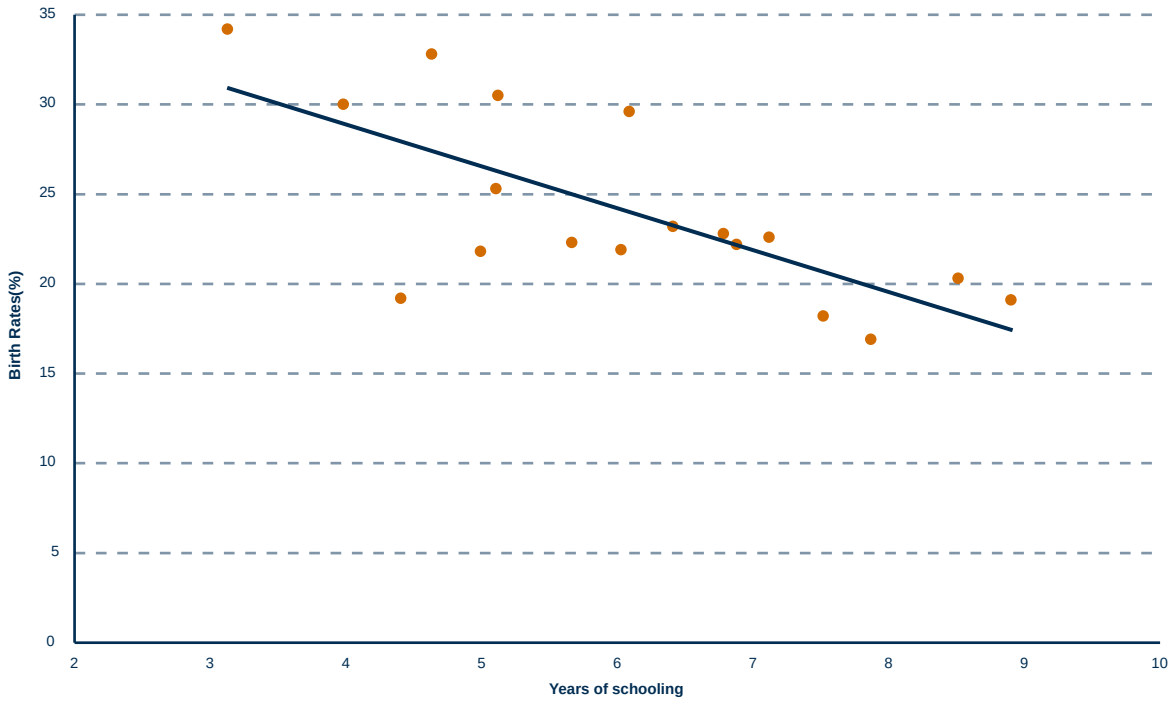
66 Carlos Muñoz Izquierdo et. al. (2003) Desarrollo de una propuesta de indicadores del impacto social de la educación en América Latina y el Caribe

Something analogous is seen regarding the link between years of schooling of the female population over 15 years of age and birth rates.

BIRTH RATES (2000-2005) AND AVERAGE SCHOOLING OF THE FEMALE POPULATION OVER 15 YEARS OF AGE

FIGURE 33

Source: ECLAC estimates (2000) and Barr and Lee (2000). See data appendix



Birth rates indicate the number of live births per 1,000 inhabitants. The higher the level of education, the lower the observed birth rates. The highest birth rate can be observed in Guatemala (34.2). There the women average schooling is 3.1 years. On the other hand, the lowest birth rate can be seen in Barbados (12.1), where the women average schooling is 8.6 years.

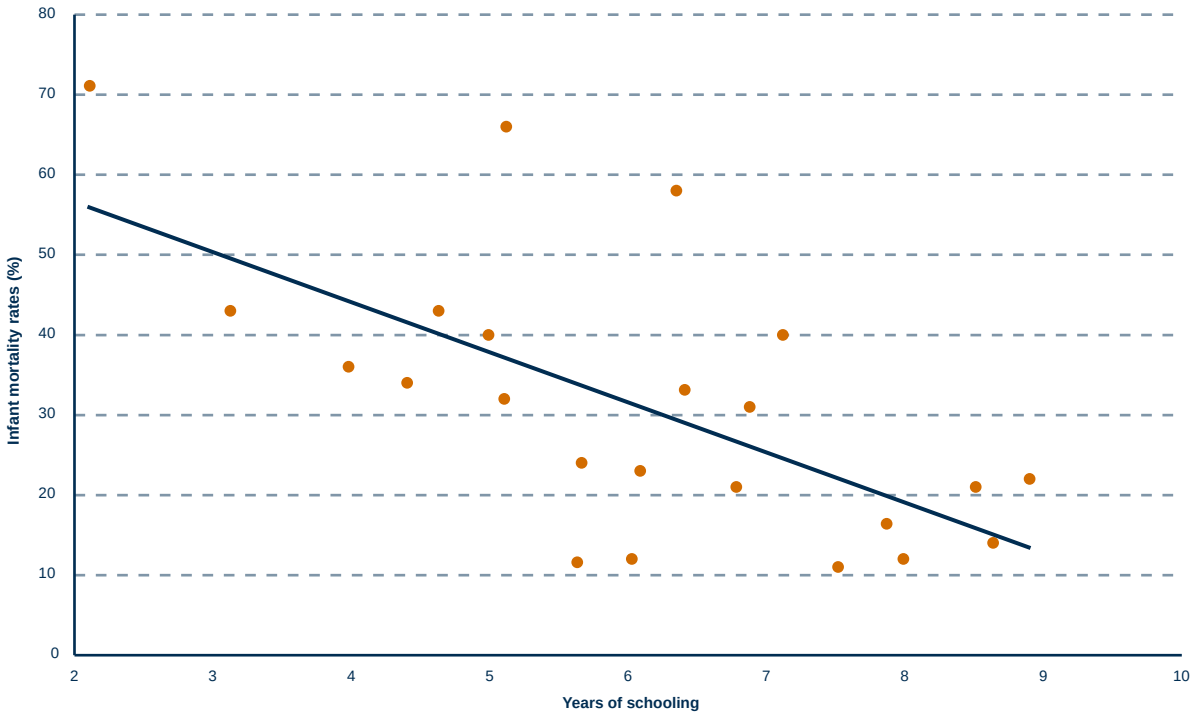
2.4. INFANT MORTALITY AND PREVENTION

The acquisition of knowledge on hygiene, nutrition, and preventive medicine makes possible an improvement in the health of children, and reduce the risk of death at an early age.

Figure 34 shows the relationship between average schooling of women over 15 years of age and the infant mortality rate. This table shows the number of deaths of children (below 1 year of age) per 1,000 live births in each year.

FIGURE 34 INFANT MORTALITY RATES (2000-2005) AND AVERAGE SCHOOLING OF THE FEMALE POPULATION OVER 15 YEARS OF AGE (1999)

Source: ECLAC estimates (2000) and Barro and Lee (2000).
See data appendix.



It can be observed that the higher the levels of schooling, the lower the infant mortality rates. This shows the impact of the education of mothers on the health of their children. The infant mortality rate varies from 10.9 in Costa Rica, where women have an average of 6 years of schooling, to 59.1 in Haiti, where the female population has an average of 2.1 years of schooling.

CONCLUSIONS

The fulfillment of the goals set at the Summit of the Americas is essential for the development of our countries and populations. Achieving universal primary education, improving access to secondary education, and providing life-long educational opportunities are duties of all members of society. The quality of life of current and future generations rely on the fulfillment of these goals. However, available information shows that much remains to be done if we want to move, in the next seven years, towards reaching the Summit goals.

In the case of primary education, only a few countries have over 90% of its population with 6 or more years of schooling. Moreover, although there are no observed gender differences, the difference in years of schooling are primarily geographic (urban versus rural). In this manner, while in urban areas, on average 90% of the population between the ages of 15 and 24 has attained 6 years of schooling, in rural areas, the rates reach only 65%. This highlights the importance of recognizing the geographic realities in each region when designing and implementing different educational policies.

At the same time, access is marked by geographic differences. Thus, higher access to primary education can be observed in urban areas. It is worth noting that, in effect, access to primary education has attained significant levels of expansion with the use of teaching methods with lower unitary costs, such as multi-grade schools.

Similarly, available evidence on levels of academic achievement make it clear that there are marked inequalities in what education systems offer to children from different socioeconomic backgrounds. In effect, education systems are not effectively fighting pre-existing social differences.

In the case of secondary education, these limitations are even more marked. The fact that, around 60% of the official-age youth are enrolled at secondary education jeopardizes achieving the goal of 75% enrollment at this level. Moreover, levels of access and completion are associated with the countries' wealth and benefit mainly urban populations. In fact, while in urban areas, on average 50% of the population between the ages of 15 and 24 has attained 10 years of schooling, in rural areas, the rates reach only 20%. Nevertheless, some countries have developed forms of open or distance education (tele-secondary), making possible to have greater levels of access to secondary education among dispersed populations than those possible through in-class methods. In this sense, the new communication and information technologies have to be more exploited.

Evidence on skill levels achieved by the population 15 years of age shows that, with exceptions, such as Canada and the United States, young people in the Americas are in a precarious position for successfully facing the challenges of contemporary society.

All of the above argues for the need of more effective education policies that emphasize equity in access and completion, as well as in student achievement.

In this sense, education policies should focus on assuring that education systems provide learning for all children, allowing for them to overcome the adverse conditions they inherit. Thus, they may be better prepared to face the challenges of contemporary society.

Individuals with higher levels of human capital are able to attain a better quality of life because they have more opportunities available to them. For this reason, education must be a permanent activity for all individuals and go well beyond formal education. Providing lifelong learning opportunities recognizes an inherent human condition. Consequently, social organizations must be willing to safeguard and readily provide these opportunities. Unfortunately, there is no empirical evidence regarding the regional progress in the provision of lifelong learning opportunities, which makes it very difficult to monitor the attainment of this third goal.

Finally it is important to remember that education is a basic human right. Its benefits are not limited to those who receive it directly, but rather touch upon the entire community. It has been shown that education has a strong impact on the economic, social and political areas of the society. In addition, evidence analyzed here shows that these effects are also present in the Americas. Education allows people to earn higher salaries, face lower unemployment rates, contributes to the creation of social networks, strengthens democratic institutions, improves the health of the population, and decreases the proportion of household living in poverty. Consequently, we must work together as a society to ensure that these goals become a reality that drives the work in our region and successfully catapults it into the realm of information and knowledge societies.

appendices

Table 1:
Net intake rate to first grade of primary education (1998-2000)

	1998/1999			1999/2000			2000/2001		
Country	Total	M	F	Total	M	F	Total	M	F
Anguilla	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Antigua & Barbuda	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Netherland Antilles	95.8	95.7	96.0	89.8	87.7	92.1	88.1	88.7	87.5
Argentina	n.d.	n.d.	n.d.	92.2	92.1	92.3	n.d.	n.d.	n.d.
Aruba	94.8	95.7	93.8	85.9	80.6	91.5	91.4	92.8	89.9
Bahamas	82.8	84.0	81.6	80.1	80.9	79.3	n.d.	n.d.	n.d.
Barbados	87.4	86.6	88.1	81.5	80.0	83.0	85.2	85.5	84.9
Belice	86.2	87.7	84.5	84.3	86.3	82.1	77.3	76.8	77.7
Bermuda	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Bolivia	65.0	64.8	65.3	68.0	67.7	68.4	67.1	66.2	68.0
Brazil	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Canada	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Chile	37.7	37.3	38.1	37.1	36.7	37.4	37.1	36.8	37.3
Colombia	55.8	n.d.	n.d.	57.3	58.1	56.3	58.7	60.0	57.3
Costa Rica	n.d.	n.d.	n.d.	59.1	58.2	60.1	60.7	60.6	60.8
Dominica	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Dominican Rep.	60.9	60.7	61.0	62.6	62.8	62.4	62.9	63.1	62.7
Ecuador	82.3	81.9	82.9	81.7	81.2	82.2	81.5	80.5	82.6
El Salvador	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Grenada	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	65.1	n.d.	n.d.
Guatemala	n.d.	n.d.	n.d.	56.2	57.8	54.5	60.7	62.0	59.2
Guyana	92.0	90.9	93.1	90.1	91.6	88.6	n.d.	n.d.	n.d.
Haiti	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Honduras	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	48.5	48.5	48.6
Cayman Island	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
British Virgin Island	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Jamaica	n.d.	n.d.	n.d.	82.2	80.1	84.3	82.2	79.9	84.6
Mexico	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	84.3	82.6	85.9
Montserrat	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Nicaragua	n.d.	n.d.	n.d.	39.8	40.8	38.7	39.7	40.8	38.6
Panama	n.d.	n.d.	n.d.	85.5	85.1	86.0	86.5	85.9	87.1
Paraguay	70.8	69.7	71.9	68.7	67.4	70.0	71.2	70.4	71.9
Peru	n.d.	n.d.	n.d.	84.7	84.7	84.7	89.1	88.9	89.3
St. Vicent & Grenadines	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
St. kitts and Nevis	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
St. Lucia	80.4	80.2	80.6	77.7	76.9	78.6	72.2	71.3	73.3
Suriname	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	75.1	79.1	70.8
Trinidad & Tobago	69.1	68.9	69.4	67.7	68.3	67.1	66.3	65.8	66.9
Turcos & Caicos	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Uruguay	49.2	49.2	49.2	44.9	44.5	45.4	36.6	35.3	38.0
USA	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Venezuela	n.d.	n.d.	n.d.	63.5	63.0	64.0	63.8	61.8	65.9

UIS estimation
Source: UIS database (www.uis.unesco.org)
The data corresponds to the academic years started in 1998, 1999 and 2000 finishing at the following or the same year according to the respective academic calendar
Primary education is equivalent to ISCED 1

Table 2:
Net enrollment rate to primary education (1998-2000)

	1998/1999			1999/2000			2000/2001		
Country	Total	M	F	Total	M	F	Total	M	F
Anguilla	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Antigua & Barbuda	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Netherland Antilles	96.2	95.7	96.7	95.0	94.6	95.5	91.2	96.2	86.1
Argentina	100.0	100.0	100.0	99.9	100.0	99.8	99.7	100.0	99.4
Aruba	97.8	97.4	98.1	99.6	100.0	99.2	97.0	97.5	96.4
Bahamas	87.8	87.8	87.8	82.8	86.0	79.5	n.d.	n.d.	n.d.
Barbados	99.6	100.0	99.2	99.7	99.4	100.0	99.7	99.4	100.0
Belize	99.9	100.0	99.7	99.8	100.0	99.6	98.2	96.4	100.0
Bermuda	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Bolivia	97.6	97.8	97.4	97.9	98.0	97.8	96.9	96.8	97.1
Brazil	n.d.	n.d.	n.d.	96.5	99.8	93.2	96.7	100.0	93.3
Canada	97.2	97.1	97.2	98.6	98.5	98.8	99.8	99.7	99.9
Chile	87.9	88.4	87.4	88.9	89.4	88.4	88.8	89.4	88.3
Colombia	86.7	n.d.	n.d.	88.1	88.2	88.1	88.5	88.7	88.3
Costa Rica	n.d.	n.d.	n.d.	91.3	91.4	91.1	91.1	91.1	91.1
Dominica	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Dominican Rep.	88.2	87.4	89.1	90.6	89.8	91.4	92.5	91.7	93.3
Ecuador	96.7	96.2	97.2	97.7	97.4	98.0	99.3	98.8	99.8
El Salvador	80.6	74.3	87.2	80.9	74.5	87.5	n.d.	n.d.	n.d.
Grenada	98.1	n.d.	n.d.	73.4	n.d.	n.d.	84.2	n.d.	n.d.
Guatemala	76.5	79.1	73.9	81.1	83.7	78.4	84.3	86.4	82.1
Guyana	97.2	100.0	94.3	97.9	99.2	96.7	n.d.	n.d.	n.d.
Haiti	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Honduras	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	87.6	86.8	88.4
Cayman Island	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
British Virgin Island	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Jamaica	90.2	90.1	90.3	94.2	94.3	94.1	94.9	94.9	95.0
Mexico	99.6	99.1	100.0	99.5	99.0	100.0	99.4	98.8	100.0
Montserrat	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Nicaragua	77.9	76.9	79.0	79.4	79.0	79.8	80.7	80.3	81.2
Panama	98.0	98.1	97.9	98.0	98.1	97.9	99.9	99.8	100.0
Paraguay	91.7	91.3	92.0	91.5	91.3	91.7	92.1	91.8	92.5
Peru	99.7	100.0	99.4	99.8	100.0	99.6	99.9	100.0	99.7
St. Kitts and Nevis	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
St. Vicent & Grenadinas	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
St. Lucia	96.5	96.6	96.4	99.7	99.8	99.5	99.7	99.5	100.0
Suriname	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	98.4	97.0	100.0
Trinidad & Tobago	92.8	92.8	92.9	92.9	93.1	92.8	92.4	92.5	92.4
Turks & Caicos	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Uruguay	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	90.4	90.0	90.8
USA	94.3	94.3	94.2	94.6	94.7	94.6	94.9	94.3	95.6
Venezuela	86.1	85.6	86.6	88.0	87.5	88.5	88.0	87.1	88.9

UIS estimation
National estimation
Source: UIS database (www.uis.unesco.org)
The data corresponds to the academic years started in 1998, 1999 and 2000 finishing at the following or the same year according to the respective academic calendar
Primary education is equivalent to ISCED 1

Table 3:
Survival rate to the 5th grade of primary education (1998/1999, 1999/2000)

	1998/1999			1999/2000		
Country	Total	M	F	Total	M	F
Anguilla	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Antigua & Barbuda	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Netherlend Antilles	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Argentina	94.7	93.3	96.1	90.3	90.1	90.5
Aruba	96.8	97.4	96.2	98.1	96.5	100.0
Bahamas	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Barbados	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Belize	77.8	76.2	79.5	81.5	81.5	81.5
Bermuda	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Bolivia	82.1	82.8	81.3	83.0	84.5	81.5
Brazil	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Canada	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Chile	99.8	99.6	100.0	99.9	100.0	99.9
Colombia	69.0	66.0	72.2	66.6	64.0	69.3
Costa Rica	n.d.	n.d.	n.d.	80.2	76.7	84.2
Dominica	91.1	85.1	98.3	86.2	87.5	84.9
Dominican Rep.	75.1	71.4	79.1	n.d.	n.d.	n.d.
Ecuador	77.0	76.8	77.2	77.8	76.4	79.4
El Salvador	70.7	69.4	72.2	n.d.	n.d.	n.d.
Grenada	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Guatemala	n.d.	n.d.	n.d.	56.0	54.5	57.7
Guyana	94.8	100.0	89.6	n.d.	n.d.	n.d.
Haiti	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Honduras	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Cayman Islands	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
British Virgin Island	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Jamaica	n.d.	n.d.	n.d.	88.9	87.0	90.8
Mexico	89.0	88.0	90.0	88.5	87.5	89.5
Montserrat	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Nicaragua	n.d.	n.d.	n.d.	48.4	44.6	52.6
Panama	n.d.	n.d.	n.d.	91.9	91.5	92.4
Paraguay	70.0	68.9	71.2	78.1	76.2	80.2
Peru	87.9	88.2	87.6	87.4	88.2	86.6
St. Kitts and Nevis	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
St. Vicent & Grenadines	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
St. Lucia	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Suriname	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Trinidad & Tobago	99.7	99.5	100.0	98.2	96.5	100.0
Turks & Caicos	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Uruguay	85.8	82.8	89.1	90.8	93.3	88.4
USA	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Venezuela	90.8	87.6	94.3	n.d.	n.d.	n.d.

UIS estimation
Source: UIS database (www.uis.unesco.org)
The data corresponds to the academic years started in 1998, 1999 and 2000 finishing at the following or the same year according to the respective academic calendar
Primary education is equivalent to ISCED 1

Table 4:
Net enrollment rate to secondary education (1998-2000)

	1998/1999			1999/2000			2000/2001		
Country	Total	M	F	Total	M	F	Total	M	F
Anguilla	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Antigua & Barbuda	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Netherland Antilles	78.3	71.9	84.7	67.9	62.5	73.4	65.8	57.2	74.6
Argentina	73.7	71.1	76.3	76.0	72.9	79.2	79.1	76.6	81.6
Aruba	79.3	76.5	82.1	80.0	78.2	81.7	72.1	70.3	73.8
Bahamas	n.d.	n.d.	n.d.	86.0	85.1	86.9	n.d.	n.d.	n.d.
Barbados	88.3	86.3	90.3	89.7	90.2	89.2	85.0	86.1	83.7
Belize	n.d.	n.d.	n.d.	61.9	59.7	64.2	63.3	61.1	65.5
Bermuda	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Bolivia	61.6	63.8	59.3	n.d.	n.d.	n.d.	68.1	68.9	67.4
Brazil	n.d.	n.d.	n.d.	68.5	65.7	71.3	71.3	68.7	74.0
Canada	94.0	94.3	93.7	97.9	97.6	98.2	97.8	97.6	98.0
Chile	70.3	68.8	71.9	n.d.	n.d.	n.d.	74.5	73.5	75.6
Colombia	n.d.	n.d.	n.d.	54.3	51.5	57.1	56.5	53.9	59.3
Costa Rica	n.d.	n.d.	n.d.	43.4	40.8	46.0	49.2	46.8	51.8
Dominica	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Dominican Rep.	39.5	34.6	44.6	40.0	35.2	45.0	40.2	35.4	45.2
Ecuador	45.9	45.2	46.7	46.9	46.2	47.6	48.1	47.2	48.9
El Salvador	39.3	39.5	39.0	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Grenada	46.7	n.d.	n.d.	n.d.	n.d.	n.d.	45.5	n.d.	n.d.
Guatemala	21.3	21.8	20.8	23.0	24.4	21.6	26.2	27.0	25.4
Guyana	73.3	70.4	76.2	86.4	84.3	88.6	n.d.	n.d.	n.d.
Haiti	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Honduras	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Cayman Island	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
British Virgin Island	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Jamaica	73.9	73.4	74.5	74.7	73.1	76.3	74.4	72.8	76.0
Mexico	56.0	56.1	56.0	57.4	57.2	57.6	59.7	57.3	62.1
Montserrat	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Nicaragua	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	35.5	32.6	38.5
Panama	61.7	59.8	63.7	60.9	58.2	63.7	62.2	59.5	65.0
Paraguay	42.1	40.7	43.4	45.0	43.8	46.3	46.7	45.3	48.1
Peru	61.5	62.2	60.7	n.d.	n.d.	n.d.	65.4	66.6	64.2
St. Kitts and Nevis	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
St. Vicent & Grenadines	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Santa Lucia	n.d.	n.d.	n.d.	67.4	61.8	72.9	70.8	61.7	79.7
Suriname	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	61.0	55.1	67.2
Trinidad & Tobago	72.5	70.0	75.0	65.8	64.4	67.2	70.7	68.4	73.0
Turks & Caicos	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Uruguay	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	69.9	66.3	73.7
USA	86.9	n.d.	n.d.	87.4	86.5	88.4	88.1	87.2	89.1
Venezuela	48.1	43.1	53.3	50.4	45.9	55.0	50.4	45.8	55.1

UIS estimation
National estimation
Source: UIS database (www.uis.unesco.org)
The data corresponds to the academic years started in 1998, 1999 and 2000 finishing at the following or the same year according to the respective academic calendar
Secondary education is equivalent to ISCED 2 and 3

Table 5:

Distribution of the population by area of residence (2000). In percentage.

Country	Urban	Rural
Anguilla	12.0	88.0
Antigua & Barbuda	36.8	63.2
Netherland Antilles	70.4	29.6
Argentina	89.6	10.4
Aruba	n.d.	n.d.
Bahamas	88.5	11.5
Barbados	50.0	50.0
Belize	54.2	45.8
Bermuda	100.0	0.0
Bolivia	64.6	35.4
Brazil	79.9	20.1
Canada	n.d.	n.d.
Chile	85.7	14.3
Colombia	74.5	25.5
Costa Rica	50.4	49.6
Dominica	71.0	29.0
Dominican Rep.	60.2	39.8
Ecuador	62.7	37.3
El Salvador	55.2	44.8
Grenada	37.9	62.1
Guatemala	39.4	60.6
Guyana	38.2	61.8
Haiti	38.1	61.9
Honduras	48.2	51.8
Cayman Island	100.0	0.0
British Virgin Island	61.1	38.9
Jamaica	56.1	43.9
Mexico	75.4	24.6
Montserrat	18.4	81.6
Nicaragua	55.3	44.7
Panama	57.6	42.4
Paraguay	56.1	43.9
Peru	72.3	27.7
St. Kitts and Nevis	34.1	65.9
St. Vincent & Grenadines	54.8	45.2
St. Lucia	37.8	62.2
Suriname	74.2	25.8
Trinidad & Tobago	74.1	25.9
Turks and Caicos	45.2	54.8
Uruguay	92.6	7.4
USA	n.d.	n.d.
Venezuela	87.4	12.6

Source: United Nations Population Division, World Urbanization Prospects: The 1999 Revision for the Caribbean
CELADE. Boletín demográfico 63 (January 1999) for Latin America

Table 6:
Population 15 - 24 years of age by years of schooling attained (circa 2000,%)

		TOTAL								URBAN								RURAL							
		At least 6 years				10 o more				At least 6 years				10 o more				At least 6 years				10 o more			
Country	Year	Total	M	F	MFP	Total	M	F	MFP	Total	M	F	MFP	Total	M	F	MFP	Total	M	F	MFP	Total	M	F	MFP
Argentina	2000	98.1	97.2	98.9	1.02	55.3	48.2	62.2	1.29	98.1	97.2	98.9	1.02	55.3	48.2	62.2	1.29	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Bolivia	2000	78.5	81.4	75.7	0.93	50.8	54.4	47.5	0.87	89.6	91.4	88.0	0.96	64.4	67.7	61.6	0.91	52.4	57.9	46.7	0.81	18.6	23.1	14.0	0.61
Brazil	1999	66.3	62.2	70.3	1.13	26.5	22.9	30.0	1.31	73.1	69.3	76.6	1.11	30.4	26.4	34.2	1.30	37.2	31.9	43.3	1.36	10.0	8.2	12.2	1.49
Chile	2000	96.6	96.3	96.8	1.01	63.7	62.2	65.1	1.05	97.4	97.2	97.5	1.00	67.3	66.2	68.3	1.03	91.5	90.5	92.6	1.02	41.6	38.1	45.4	1.19
Colombia	1999	77.6	76.4	79.0	1.03	45.7	43.5	47.7	1.10	85.4	85.1	85.7	1.01	53.0	51.1	54.6	1.07	53.8	49.8	58.3	1.17	23.1	20.1	26.5	1.32
Costa Rica	2000	86.6	85.3	88.1	1.03	27.9	26.3	29.7	1.13	91.9	90.7	93.0	1.03	38.4	36.6	40.2	1.10	81.7	80.3	83.4	1.04	18.1	16.6	19.8	1.19
Dominican Rep.	2000	77.6	74.3	81.0	1.09	40.9	35.4	46.3	1.31	86.9	84.3	89.4	1.06	51.4	44.9	57.6	1.28	62.6	58.2	67.5	1.16	23.9	20.1	28.1	1.40
Ecuador	2000	91.2	90.6	91.9	1.01	44.9	44.0	46.0	1.05	94.7	94.0	95.5	1.02	57.6	56.7	58.7	1.04	84.8	84.4	85.3	1.01	21.7	20.7	22.8	1.10
El Salvador	2000	71.7	72.2	71.0	0.98	31.7	31.1	32.1	1.03	85.5	85.9	85.0	0.99	45.8	45.6	45.9	1.01	53.7	54.4	52.8	0.97	13.2	12.2	14.1	1.16
Guatemala	1998	50.7	54.6	46.9	0.86	15.4	15.1	15.6	1.04	74.7	75.7	73.9	0.98	31.2	29.9	32.4	1.08	32.7	38.8	26.8	0.69	3.6	4.0	3.1	0.78
Honduras	1999	70.0	68.6	71.2	1.04	16.4	14.4	18.1	1.25	83.8	82.3	84.9	1.03	26.1	23.5	28.2	1.20	54.6	53.3	55.9	1.05	5.5	4.3	6.7	1.56
Mexico	2000	90.1	90.6	89.6	0.99	43.2	42.8	43.5	1.02	92.7	93.2	92.2	0.99	49.6	49.2	49.9	1.01	80.9	81.4	80.4	0.99	20.7	20.4	21.1	1.03
Nicaragua	1998	61.1	58.0	64.4	1.11	18.4	16.2	20.5	1.27	78.2	76.0	80.3	1.06	27.7	25.3	30.0	1.19	38.8	34.4	43.6	1.27	6.2	4.3	8.2	1.91
Panama	1999	92.4	91.3	93.6	1.02	45.7	41.1	50.4	1.23	96.1	95.6	96.5	1.01	55.3	51.7	58.8	1.14	87.1	85.2	89.3	1.05	31.7	25.8	38.2	1.48
Paraguay	1999	85.1	84.5	85.6	1.01	35.9	36.2	35.7	0.99	94.7	94.7	94.6	1.00	50.4	51.6	49.4	0.96	71.0	69.5	72.5	1.04	14.5	13.5	15.5	1.15
Peru	1999	91.0	92.5	89.5	0.97	53.9	54.7	53.1	0.97	96.6	97.0	96.4	0.99	63.7	63.7	63.8	1.00	74.9	79.7	69.7	0.87	25.9	29.1	22.5	0.77
Uruguay	2000	97.2	96.6	97.8	1.01	47.8	40.7	55.1	1.35	97.2	96.6	97.8	1.01	47.8	40.7	55.1	1.35	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Venezuela	2000	88.9	86.2	91.8	1.06	41.9	35.5	48.6	1.37	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.

Notes:
Argentina: only Gran Buenos Aires
Uruguay: only urban areas
Venezuela: only national data, not desagregated by geographic area
Nacional value is calculated using the proportion of the urban population 15-24 years of age at the year 2000.
MFP: Parity index for the male and female values
Source: Calculated by PRIE based on ECLAC, Social Panorama of Latin America 2001-2002 and CELADE, Boletín Demográfico 63 .

Table 7:
Gross Domestic Product per capita
(2000, in US dollars PPP)

Country	GDP pc PPP
Anguilla	n.d.
Antigua & Barbuda	10,541
Argentina	12,377
Aruba	n.d.
Bahamas	17,012
Barbados	15,494
Belize	5,606
Bermuda	n.d.
Bolivia	2,424
Brazil	7,625
British Virgin Island	n.d.
Canada	27,840
Cayman Island	n.d.
Chile	9,417
Colombia	6,248
Costa Rica	8,650
Dominica	5,880
Dominican Rep.	6,033
Ecuador	3,203
El Salvador	4,497
Grenada	7,580
Guatemala	3,821
Guyana	3,963
Haiti	1,467
Honduras	2,453
Jamaica	3,639
Mexico	9,023
Montserrat	n.d.
Netherland Antilles	n.d.
Nicaragua	2,366
Panama	6,000
Paraguay	4,426
Peru	4,799
St. Kitts and Nevis	12,510
St. Lucia	5,703
St. Vicent & Grenadines	5,555
Suriname	3,799
Trinidad & Tobago	8,964
Turks & Caicos	n.d.
Uruguay	9,035
USA	34,142
Venezuela	5,794

Source: Human Development Report 2002, UNDP.

Table 8:

Percentage of students who reach each performance level by subject matter and disaggregations. LLECE 1997.

	LENGUAJE														
	Public			Private			Megacity			Urban			Rural		
Country	Level I	Level II	Level III	Level I	Level II	Level III	Level I	Level II	Level III	Level I	Level II	Level III	Level I	Level II	Level III
Argentina	95	77	57	99	93	78	96	85	72	96	79	59	88	62	42
Bolivia	87	55	30	91	70	46	90	66	39	87	58	35	77	40	24
Brazil	95	80	54	98	93	72	96	88	62	95	82	58	84	62	38
Chile	93	71	49	97	86	67	94	76	53	95	79	60	89	63	41
Colombia	89	59	35	97	81	56	96	79	53	89	60	36	89	57	33
Cuba	100	98	92	n.a.	n.a.	n.a.	100	99	93	100	98	92	100	98	92
Dominican Rep.	77	52	30	83	64	42	84	65	42	73	44	25	73	39	20
Honduras	87	55	29	94	73	44	92	67	38	87	55	29	78	35	17
Mexico	89	58	38	96	84	65	94	70	50	89	64	43	82	48	30
Paraguay	88	60	37	93	75	54	n.a.	n.a.	n.a.	90	67	44	81	51	32
Peru	86	55	29	94	78	54	92	70	43	86	57	34	71	30	13
Venezuela	88	59	38	91	70	49	91	68	48	88	60	38	84	58	39

	MATHEMATICS														
	Public			Private			Megacity			Urban			Rural		
Country	Level I	Level II	Level III	Level I	Level II	Level III	Level I	Level II	Level III	Level I	Level II	Level III	Level I	Level II	Level III
Argentina	96	54	12	98	71	23	98	70	26	96	54	11	94	43	6
Bolivia	93	43	9	96	59	18	95	49	12	94	51	14	89	36	8
Brazil	93	52	12	97	67	26	96	58	17	94	55	15	84	40	7
Chile	92	46	7	97	57	15	94	49	10	95	52	12	87	38	6
Colombia	93	42	5	97	55	10	97	53	8	93	43	6	92	50	12
Cuba	100	92	79	n.a.	n.a.	n.a.	100	95	82	99	90	76	99	89	72
Dominican Rep.	82	37	4	86	43	7	86	42	6	81	36	4	79	38	7
Honduras	84	36	7	93	39	5	87	35	3	86	39	8	78	23	13
Mexico	94	55	10	98	69	20	97	62	13	94	58	13	90	46	10
Paraguay	87	29	2	90	49	12	n.a.	n.a.	n.a.	88	42	9	82	34	8
Peru	87	29	2	94	54	11	88	43	8	89	33	4	78	23	2
Venezuela	76	25	2	76	33	5	75	26	3	77	27	3	68	22	2

Source: UNESCO (2001) Technical Report of the First International Comparative Study. August 2001. Accessible at www.unesco.cl

Table 9:
Percentage of students by achievement levels in the reading combined scale PISA 2000.

Country	Level V	Level IV	Level III	Level II	Level I	Below level I
Argentina	2	9	20	26	21	23
Brazil	1	3	13	28	33	23
Canada	17	28	28	18	7	2
Chile	1	5	17	30	28	20
Mexico	1	6	19	30	28	16
Peru	0	1	5	15	26	54
USA	12	21	27	21	12	6
OECD Average	9	22	29	22	12	6

Source: PISA (2003) Literacy skills for the world of tomorrow - further results from PISA 2000.

Table 10:
Average score by gender and difference in the reading combined scale PISA 2000.

Country	Dif	M	F
Argentina	44	393	437
Brazil	16	388	404
Canada	32	519	551
Chile	25	396	421
Mexico	21	411	432
Peru	6	324	330
USA	28	490	518

Source: PISA (2003) Literacy skills for the world of tomorrow - further results from PISA 2000.

Table 11:
Rate of return to education by educational level, urban areas (1999)

Group of Countries	Primary education	Secondary education	Higher education
Group A	4.4	8.7	17.8
Group B	6.1	9.5	14.9
Group C	7.6	13.8	18.1

Source: Social Panorama of Latin America. ECLAC (2002)
Group A: Argentina, Bolivia, Chile, Colombia and Panama
Group B: Costa Rica, Ecuador, Mexico, Paraguay, Uruguay and Venezuela
Group C: Brazil, El Salvador, Guatemala, Honduras and Nicaragua.

Table 12:
Income differential by level of education attained (population 25-64 years of age) (1999)

MALE					
Country	No schooling	Primary	Lower secondary	Upper secondary	Higher (academic)
Argentina	0.3	0.6	0.7	1.0	2.2
Brazil	0.2	0.5	0.6	1.0	2.6
Canada	n.d.	n.d.	0.8	1.0	1.6
Chile	0.3	0.5	0.6	1.0	3.2
Paraguay	0.1	0.4	0.3	1.0	3.9
Peru	0.1	0.4	0.7	1.0	2.3
Uruguay	0.4	0.6	0.8	1.0	2.1
USA	n.d.	n.d.	0.6	1.0	1.9

FEMALE					
Country	No schooling	Primary	Lower secondary	Upper secondary	Higher (academic)
Argentina	0.4	0.5	0.7	1.0	2.1
Brazil	0.2	0.4	0.6	1.0	2.8
Canada	n.d.	n.d.	0.7	1.0	1.7
Chile	1.0	0.5	0.5	1.0	2.7
Paraguay	0.0	0.1	0.1	1.0	2.6
Peru	0.2	0.5	0.8	1.0	2.2
Uruguay	0.3	0.5	0.8	1.0	1.6
USA	n.d.	n.d.	0.6	1.0	1.7

Source: UNESCO/OCDE (2003) Financing education - investments and returns; OECD (2002) Education at a glance
Note: The information on USA and Canada corresponds to the year 2001.

Table 13:
Labor market participation by level of education (1999)

MALE							
Country	No schooling	Incomplete primary	Complete primaria	Lower secondary	Upper secondary	Higher (technical programs)	Higher (academic programs)
Argentina	67.4	86.6	90.8	92.9	92.0	n.d.	97.0
Brazil	85.4	89.8	90.6	92.3	92.9	n.d.	93.3
Canada	n.d.	n.d.	n.d.	73.0	88.0	91.0	90.0
Chile	70.5	88.0	90.1	94.4	94.3	93.5	94.1
Mexico	n.d.	n.d.	n.d.	94.0	96.0	97.0	94.0
Paraguay	86.8	94.8	95.0	96.6	95.1	n.d.	97.4
Peru	92.1	95.9	95.2	95.4	93.5	93.8	95.1
Uruguay	65.8	81.1	91.0	94.9	94.9	95.3	n.d.
USA	n.d.	n.d.	n.d.	75.0	86.0	90.0	92.0

FEMALE							
Country	No schooling	Incomplete primary	Complete primaria	Lower secondary	Upper secondary	Higher (technical programs)	Higher (academic programs)
Argentina	32.2	42.9	45.1	50.6	59.9	n.d.	87.0
Brazil	49.6	55.4	57.1	61.9	71.7	n.d.	83.0
Canada	n.d.	n.d.	n.d.	48.0	73.0	81.0	83.0
Chile	16.2	25.9	32.2	37.2	54.2	66.7	79.6
Mexico	n.d.	n.d.	n.d.	37.0	56.0	61.0	70.0
Paraguay	45.0	47.3	55.5	65.6	74.5	n.d.	91.6
Peru	74.7	75.0	70.9	63.4	63.6	76.1	81.5
Uruguay	27.3	40.5	58.0	70.1	76.4	87.0	n.d.
USA	n.d.	n.d.	n.d.	52.0	73.0	80.0	81.0

Source: UNESCO/OCDE (2003) Financing education - investments and returns; OECD (2002) Education at a glance
Note: The information on USA and Canada corresponds to the year 2001.

Table 14:
Unemployment rates by years of schooling, urban areas (circa 2000)

	YEARS OF SCHOOLING			
Country	0-5 years	6-9 years	10-12 years	13 and more
Argentina	18.0	18.0	16.2	7.8
Bolivia	5.6	8.8	8.7	5.5
Brazil	9.9	15.6	12.2	5.2
Chile	12.4	13.2	11.4	6.6
Colombia	15.3	23.2	23.2	14.1
Costa Rica	7.3	6.6	5.0	1.9
Dominican Rep.	12.0	13.5	16.4	12.9
Ecuador	6.0	7.5	12.4	8.4
El Salvador	5.5	6.1	9.8	4.7
Honduras	4.8	6.3	4.3	4.0
Mexico	1.2	2.2	2.9	2.1
Nicaragua	11.8	14.2	18.5	12.4
Panama	7.2	14.2	16.2	9.6
Peru	4.9	10.0	7.1	7.7
Uruguay	12.3	15.6	13.0	8.8
Venezuela	10.7	13.4	15.6	12.4

Notes:
Argentina: Great Buenos Aires only
Paraguay: Asunción only
Source: ECLAC (2002) Social Panorama of Latin America 2001-2002.

Table 15:
Percentage of the poor or extremely poor populations and average years of schooling for the 25-59 age-group (circa 2000, urban areas)

Country	Average years of schooling	Population below poverty line	Population below line of extreme poverty
Argentina	10.2	23.7	6.7
Bolivia	9.6	48.7	19.8
Brazil	7.0	32.9	9.3
Colombia	8.6	50.6	21.9
Costa Rica	9.1	18.1	5.4
Chile	10.8	20.1	5.3
Dominican Rep.	8.9	35.6	11.8
Ecuador	9.8	63.6	31.3
El Salvador	8.3	38.7	13.0
Guatemala	6.5	46.0	17.2
Honduras	7.3	71.7	42.9
Mexico	9.0	32.3	6.6
Nicaragua	7.0	57.0	33.9
Panama	10.4	25.8	8.1
Paraguay	9.3	49.0	17.4
Peru	10.1	36.1	9.3
Uruguay	9.2	9.4	1.8

Notes:
Argentina: Great Buenos Aires only
Paraguay: Asunción only
Source: ECLAC (2002) Sociol Panorama of Latin America 2001-2002.

Table 16:

Percentage of young people who reach at least 12 years of schooling by educational attainment of their parents, urban areas (circa 1994)

	AÑOS DE ESCOLARIDAD			
Country	0-5 years	6-9 years	10-12 years	13 and more
Brazil	7.0	33.0	59.0	100.0
Chile	50.0	67.0	88.0	100.0
Colombia	22.0	58.0	86.0	100.0
Costa Rica	22.0	43.0	71.0	100.0
Honduras	21.0	56.0	88.0	100.0
Panama	34.0	62.0	90.0	100.0
Paraguay	30.0	73.0	100.0	100.0
Uruguay	25.0	39.0	82.0	100.0
Venezuela	14.0	38.0	68.0	100.0
Average	25.0	52.1	81.3	100.0

Source: ECLAC (2002) Sociol Panorama of Latin America 2001-2002.

Table 17:

Average years of schooling of the female population older than 15 years of age and fertility, birth and mortality rates

Country	Average schooling of the female population	Fertility rate	Birth rate	Infant mortality rate
Argentina	8.9	2.4	19.1	22.0
Barbados	8.6	1.5	n.d.	14.0
Bolivia	5.1	3.9	30.5	66.0
Brazil	4.4	2.1	19.2	34.0
Colombia	5.7	2.6	22.3	24.0
Costa Rica	6.0	2.7	21.9	12.0
Chile	7.5	2.4	18.2	11.0
Dominican Rep.	5.0	2.6	21.8	40.0
Ecuador	6.4	2.8	23.2	33.1
El Salvador	5.1	2.9	25.3	32.0
Guatemala	3.1	4.4	34.2	43.0
Guyana	6.3	2.1	n.d.	58.0
Haiti	2.1	4.0	n.d.	71.1
Honduras	4.0	3.7	30.0	36.0
Jamaica	5.6	2.3	n.d.	11.6
Mexico	6.9	2.5	22.2	31.0
Nicaragua	4.6	3.9	32.8	43.0
Panama	8.5	2.4	20.3	21.0
Paraguay	6.1	3.8	29.6	23.0
Peru	7.1	2.6	22.6	40.0
Trinidad & Tobago	8.0	1.5	n.d.	12.0
Uruguay	7.9	2.3	16.9	16.4
Venezuela	6.8	2.7	22.8	21.0

Sources:
Schooling: Barro & Lee (2000). Internacional Data on Educational Attainment: Updates and Implications (1999 information) cited by Carlos Muñoz Izquierdo et. al. (2003) Desarrollo de una propuesta de indicadores del impacto social de la educación en América Latina y el Caribe
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Birth: Estimations from ECLAC (2000) Anuario Estadistico de America Latina y el Caribe. (2000-2005)
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