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SITUATION AND TRENDS OF EDUCATION
IN SELECTED LATIN AMERICAN
COUNTRIES – 2000/2010

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This report sets out to analyze the evolution of a set of educational indicators over the first decade of this century with a sample of selected Latin American countries.

Financial indicators (spending/ investments in education) are analyzed, as well as performance and outcomes indicators on education that, to some extent, reflect the first indicators.

Educational expenditure has been used as one of the leading indicators to understand the performance of education systems in each societal context. Considering the different population sizes between countries, educational expenditure generally counts as a proportion of Gross Domestic Product (GDP). Nevertheless, the international comparison should be relativized through this indicator, since educational demands are different depending on the stage of development achieved by each country. In general, greater contributions of financial resources for the implementation of school infrastructure are needed in developing countries, when compared to those required in most countries of the Organization for Economic Cooperation and Development (OECD).

In 2008, the average public spending on education published by the OECD (2011) stood at around 5.4%.¹ However, there were countries with rates reaching 9% and others with rates below 4%. As can be seen in the ambit of this organization, the countries in the sample analyzed by this report also show great variation among them.

Generally speaking, the selected Latin American countries recorded significant increases in terms of public spending on education as a pro-

portion of GDP. According to data from ECLAC (2011) and national statistical agencies, Bolivia and Venezuela were the countries with the largest percentage of investment over the period under review: 6.3% of GDP in 2006 and 2008, respectively. Argentina, Brazil, Colombia and Mexico stood at a slightly lower level, with rates between 4.9% and 5.4%. A little further down were Chile (4.5%), Uruguay (4.4%), Paraguay (4%) and El Salvador (3.6%). Finally, the countries that had the lowest spending on education were Peru (2.9%) and Ecuador (2.8%).

Table 1. Public spending on education as a proportion of Gross Domestic Product

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Argentina	4.6				3.8		4.5	4.9	5.4		
Bolivia	5.6	6.0	6.4	6.8	6.7	6.7	6.3				
Brazil	4.0				4.0	4.5	5.0	5.1	5.4		
Chile	3.9	4.1	4.2	4.1	3.9	3.7	3.3	3.6	4.2	4.5	
Colombia	4.3	4.5	4.4	4.4	4.5	4.4	4.6	4.4	4.4	4.8	5.1
Ecuador	1.9						2.8				
El Salvador	2.5					2.7	3.0		3.6		
Mexico	4.9				4.9	5.0	4.8	4.8	4.9		
Paraguay					4.0			4.0			
Peru	2.6	2.6			2.8	2.7	2.5	2.5	2.7	2.9	2.9
Uruguay	2.4				2.3	3.3	3.4	3.7	3.9	4.4	
Venezuela	5.4								6.3		

Sources: ECLAC (in bold) and official agencies of the respective countries (other data).

It is worth noting, however, that such results are related to different developments over the decade. For example, when considering the first and the last year with available data, there are different rates of spending growth among the countries in the sample. Under this approach, Uruguay (83%) was the country with the largest growth, followed by Ecuador (47%), despite having recorded one of the lowest proportions of spending on education.

When considering the absolute value achieved at the end of the period and the evolution all along this period, it's possible to conclude that the worst performance can be attributed to Peru, which applied only 2.9% of GDP in education in 2009, which is very close to the 2.6% invested at the beginning of the decade.

Educational expenditure can also be broken down by level of education. In this case, the expenditure per student as a proportion of GDP per capita was used. Regarding primary education, data provided by the World Bank indicate significant progress in Brazil. If, in 2000, the country applied only 10.7% of GDP per capita, in 2007, the proportion reached 17.3%, that is, the highest among those registered by countries analyzed in this study.

Table 2. Public spending on primary education as a proportion of GDP per capita

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Argentina	12.8	14.4	11.2	10.9	11.3	12.0	13.2	14.7	16.0	
Bolivia	12.4	11.8	15.3	16.2			13.7			
Brazil	10.7	10.4	9.8		12.8	15.4		17.3		
Chile	14.4		16.0	15.0	12.7	12.0	11.1	11.9	14.7	
Colombia	11.9	13.0	13.4		15.9	15.4	13.0	12.5	12.5	15.7
Ecuador	3.2									
El Salvador	8.5		10.2	9.3		8.1	8.5	7.9	8.5	
Mexico	13.0	13.7	14.0	14.1	13.4	13.7	13.3	13.3		
Paraguay	13.6	13.5	13.2	13.2	11.5			10.8		
Peru		7.0	6.3	6.5	7.0	6.6	7.2	7.3	8.1	
Uruguay	7.2	9.6	6.9	5.8	7.3	8.3	8.6			
Venezuela							8.0	9.2		

Source: World Bank.

Other countries that have achieved significant levels were Argentina (16%) and Colombia (15.7%) in 2008 and 2009, respectively. In turn, countries like Chile and Mexico have maintained some stability, when considering the period between 2000 and last year with available data. It is

also worth mentioning that the proportion of spending stood below 10% in four countries (El Salvador, Peru, Uruguay and Venezuela).

Expenditure per student on secondary education was led by Argentina (23.9%), which showed significant growth compared to 2000, when the proportion was only 17.6%. Brazil was next, with 18% in 2007. However, when one considers that the proportion was only 10.3% in 2000, it's possible to conclude that Brazil's progress was even more significant. As was observed in primary education, El Salvador, Peru, Uruguay and Venezuela were the countries that had the lowest percentage of spending in relation to GDP per capita.

Table 3. Public spending on secondary education as a proportion of GDP per capita

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Argentina	17.6	18.9	16.9	14.3	15.7	19.6	20.3	21.9	23.9	
Bolivia	9.6	10.3	12.7	13.1			14.5			
Brazil	10.3	10.4	10.2		11.5	13.1		18.0		
Chile	14.8		15.7	15.9	14.1	13.2	12.4	13.4	16.0	
Colombia	12.9	13.1	13.8		15.2	14.5	11.0	10.0	14.9	15.2
Ecuador	6.0									
El Salvador	7.5		9.6	8.9		9.2	7.9	9.3	9.1	
Mexico		18.8	15.7	15.3	14.1	14.8	13.7	13.4		
Paraguay	18.5	16.0	14.8	14.8	13.0			16.3		
Peru		9.2	8.7	9.9	10.1	9.6	10.0	9.8	9.9	
Uruguay	9.9	9.5	8.0	6.5	8.4	9.9	10.5			
Venezuela							8.3	8.2		

Source: World Bank.

Finally, with regard to the expenditure per student on higher education, a continuous reduction was noted in those countries that had high standards of expenditure at the beginning of the period under review. This is the case of Paraguay, Brazil and Bolivia, which in 2000 recorded proportions around 50% of GDP per capita. In 2007, the first two had reduced such proportions to less than 30%. Other countries that also had

a decrease in this expenditure per student indicator were Chile and Peru. In these cases, rates that stood at relatively low levels (about 20%) in the early period of the decade fell to around 10-12%. Finally, Argentina and Mexico have outlined some stability, when comparing initial and final rates, despite some fluctuations over the period.

Table 4. Public spending on higher education as a proportion of GDP per capita

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Argentina	17.7	16.1	13.1	10.4	11.8		14.2	15.6	16.6	
Bolivia	47.1	44.0	43.5	36.0						
Brazil	55.5	47.4	44.6		32.6	35.0		29.6		
Chile	19.4		18.0	15.0	15.4	11.6	11.8	11.5	12.1	
Colombia	29.6	30.3	23.4		20.7	19.4	18.9		26.3	27.0
Ecuador										
El Salvador	8.9		11.0	11.0		15.1	14.2	13.7		
Mexico		36.2	48.4	40.2	37.2	37.8	35.3	37.0		
Paraguay	58.9	48.8	30.3	31.7	24.6			26.0		
Peru		21.2	14.0	12.0	12.1	9.0	10.9			
Uruguay							18.3			
Venezuela										

Source: World Bank.

Among the education indicators in the strict sense, one of the most used is the literacy rate of the population aged 15 or more. According to ECLAC (2011), it appears that the countries of the sample analyzed by this study are at different stages of development. The first group consists of countries that have already achieved literacy levels comparable to those of southern Europe, such as Uruguay (98.3%), Argentina (97.7%) and Chile (97.1%), while El Salvador stands at the opposite extreme, with a rate of around 83%. However, most countries are in an intermediate situation: Paraguay (95.3%), Venezuela (95.2%), Ecuador (94.2%), Colombia (94.1%), Mexico (93.8%), Peru (93%) and, somewhat lower, Bolivia (90.6%) and Brazil (90.4%).

Table 5. Literacy rate of the population aged 15 or more

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Argentina	96.9					97.2				97.7	98.1
Bolivia	85.6	86.7				88.3				90.7	90.6
Brazil	86.4	87.6				88.9			90.0	90.3	90.4
Chile	95.7	96.2	96.3	96.4	96.5	96.5	96.5	96.2	96.0		97.1
Colombia	91.8		92.4	92.5	93.0	93.1	92.9	93.1	93.4		94.1
Ecuador	91.9	91.0									93.2
El Salvador	78.7					81.1		82.0			83.4
Mexico	90.5					91.6					93.1
Paraguay	93.3	93.8						94.6			95.3
Peru	89.9									91.1	93.0
Uruguay	97.8										98.3
Venezuela	93.0			93.5		94.4		95.2			95.2

Sources: ECLAC (in bold) and official bodies of the respective countries (other data).

To some extent, these rates reflect the different colonization processes that underwent the countries in the region. As a rule, those who specialized as suppliers of raw materials and/or precious metals devoted less effort to the universalization of elementary education. Countries/regions of the Southern Cone reported a different situation.

It should be noted, however, that not all data provided by ECLAC coincide with what is reported by official agencies of some countries. In recent years, Venezuela and Bolivia announced they had eradicated illiteracy and even received the illiteracy-free certification issued by the United Nations Educational, Scientific and Cultural Organization (UNESCO). However, such announcements have not been corroborated by the results of national censuses in both countries.

One of the Millennium Development Goals indicators, the illiteracy rate among young people aged 15-24 years was drastically reduced in almost all countries in the region. According to ECLAC, which provides data on urban population, Argentina, Bolivia and Chile have virtually eradicated illiteracy in this age group, with rates around 0.5%. However, most countries of the analyzed sample stood within the 1-2% range. Only

Ecuador recorded a rate above this threshold (3.2%). In relative terms, Bolivia, Brazil and Paraguay, which have cut their rates by half over the period of a decade, recorded the biggest increases.

Table 6. Literacy rates of the population aged 15-24 years

	2000	2010
Argentina	99.3	99.4
Bolivia	98.9	99.5
Brazil	97.0	98.6
Chile	99.1	99.4
Colombia	98.9	98.8
Ecuador	n.d.	96.8
El Salvador	96.6	97.9
Mexico	98.6	99.0
Paraguay	98.0	98.9
Peru	n.d.	98.8
Uruguay	98.3	99.5
Venezuela	97.6	98.5

Source: ECLAC and INE (Uruguay).

Obs.: Urban population.

Besides the literacy rate, the average years of schooling can be used to assess the education level in the population. For this study, one shall consider the age group of 25 years or more, which is when young people should have completed their higher education.

According to data from the United Nations Program for Development (UNDP), made available through the Human Development Index (HDI) reports for the period 2000-2010, all countries of the studied sample reported significant advances, considering that in the initial year the lowest average of schooling was 5.6 years, which in the end had increased to 7.2 years.

Table 7. Average years of schooling in the population aged 25 years or more

	2000	2005	2010
Argentina	8.6	8.9	9.3
Bolivia	7.4	8.3	9.2
Brazil	5.6	6.6	7.2
Chile	8.8	9.3	9.7
Colombia	6.5	6.7	7.3
Ecuador	6.9	7.3	7.6
El Salvador	5.7	6.7	7.5
Mexico	7.4	7.8	8.5
Paraguay	5.9	6.9	7.7
Peru	7.7	8.2	8.7
Uruguay	8.0	7.9	8.5
Venezuela	5.9	6.5	7.6

Source: UNDP.

Half of the countries exceeded the eight-year schooling average and Chile, Bolivia and Argentina recorded rates over nine years. In turn, the other six countries remain below the minimum eight-year threshold. However, with the exception of Ecuador, these were precisely the countries that had the greatest relative advances, even because they were worse off at the beginning of the decade.

The access and retention of all children at primary education can be seen as major educational achievements among the countries under analysis. Five countries of the region (Chile, Argentina, Uruguay, Bolivia and Mexico) had achieved attendance rates of at least 98%. Brazil, Ecuador and Colombia were close to this threshold, with rates above 97%. Only El Salvador recorded a slightly lower than expected rate (93%).

Table 8. School attendance rates for the 6-11 years old

	School att. Rates
Argentina	98.4
Bolivia	98.0
Brazil	97.9
Chile	99.1
Colombia	97.4
Ecuador	97.9
El Salvador	93.5
Mexico	98.3
Paraguay	97.0
Peru	96.5
Uruguay	98.9
Venezuela	n.d.

Source: Sistema de Información de Tendencias Educativas en América Latina/Dato Destacado 21: El Desafío de Universalizar el Nivel Primario - abril 2011

Universal access to primary education has led to a significant increase of education among young people in the region, which is corroborated by the increase in the primary education completion rate in the 15-19 years range. Countries like Chile (98.7%), Argentina (97.8%), Uruguay (96.7%) and Mexico (95.7%) are very close to the universalization of this basic citizenship right. In addition, Brazil (94.7%) and Ecuador (94.6%) are also close to this goal. Again, only El Salvador stood at a disadvantage (76%). It is worth noting that the universalization of primary education completion is the main educational goal of the Millennium Goals.

Table 9. Primary education completion rate of the population aged 15-19 years

	15 - 19 years	15 years
Argentina	97.8	96.0
Bolivia	93.0	87.0
Brazil	94.7	87.4
Chile	98.7	97.7
Colombia	93.6	90.4
Ecuador	94.6	94.0
El Salvador	76.1	76.5
Mexico	95.7	95.5
Paraguay	89.3	90.4
Peru	93.9	91.3
Uruguay	96.7	96.9
Venezuela	93.5	n.d.

Sources:

¹ Panorama Educativo 2010: desafíos pendientes/Proyecto Regional de Indicadores Educativos Cumbre de las Américas.

² Sistema de Información de Tendencias Educativas en América Latina/Dato Destacado 21: El Desafío de Universalizar el Nivel Primario - abril 2011

When referring to the age group of 15, there was slight decrease in the number of young people who have completed this stage of basic schooling. Again, Chile (97.7%), Uruguay (96.9%) and Argentina (96%) are those with the best performances. In turn, Brazil has a sensitive decrease in relation to the 15-19 years range, since only 87.4% of young people at this initial age have completed primary education. This shows that the age-grade distortion is still quite high in the country. However, the worst scenario is once again noted in El Salvador, with just over 75% of the population aged 15 years with a completed primary education.

Regarding secondary education, some caveats must be made. In several countries, it is considered that it begins with the first grade after the completion of primary education (the four initial grades of education following pre-school education). In Brazil, elementary school, which until 2009 had eight schooling years, comprises primary education and what

is internationally known as lower secondary education (ISCED, 2011).² Furthermore, age ranges corresponding to the levels of education defined based on this international classification also undergo changes. Therefore, some care should be taken when comparing the countries analyzed through this study.

Thus, school attendance of the population aged 12-14 years, an age range considered proper to attend the first stage of secondary education, has significantly increased in recent years. Most of the countries under review reached the end of the decade with rates above 90%, of which four (Chile, Argentina, Brazil and Bolivia) with rates between 95% and 98.4%. El Salvador and Ecuador reported the lowest schooling rates in this age group (89.8%). One must consider, however, that they were well below the average level of other countries of the sample at the beginning of the decade. In the case of Ecuador, the increase was about eight percentage points between 2001 and 2008.

Table 10. School attendance rate in the age range 12-14 years

	2000	2001	2006	2007	2008	2009
Argentina¹	97.8					97.6
Bolivia	89.2			95.0		
Brazil		95.0			96.9	
Chile	97.9		98.4			
Colombia			92.3			
Ecuador	82.0				89.8	
El Salvador	83.8				89.8	
Mexico	88.8				91.6	
Paraguay	87.6				90.8	
Peru				92.2		
Uruguay					93.9	
Venezuela						

Source: Sistema de Información de Tendencias Educativas en América Latina/Resumen Estadístico 01/julio 2010

¹ urban population.

Finally, school attendance in the 15-17 years age range has also largely increased. But the region still suffers deep inequalities in the access to education. If, in Chile, more than 90% of young people in this age group attended school, rates remained below 70% in Mexico and Peru. Despite these extreme cases, the majority of countries ranged between 70% and 87%.

Table 11. School attendance rate in the age range of 15-17 years

	2000	2001	2006	2007	2008	2009
Argentina¹	85.2					86.9
Bolivia	76.4			82.5		
Brazil		81.1			84.2	
Chile	87.8		90.8			
Colombia			71.7			
Ecuador		63.8			75.1	
El Salvador	62.8				70.1	
Mexico	57.9				65.3	
Paraguay	63.9				72.5	
Peru				67.7		
Uruguay					74.8	
Venezuela						

Source: Sistema de Información de Tendencias Educativas en América Latina/Resumen Estadístico 01/julio 2010

¹ urban population.

Although these rates are relatively high, they still conceal high numbers of students with age-grade gap. In Brazil, for example, only 50% of young people aged 15 to 17 years attended secondary education, which is the appropriate educational level for this age group.

Given the trend of the indicators analyzed, it can be said that the educational advances of the countries analyzed in this study during the first decade of this century are indisputable. To some extent, this progress reflects the continuity of educational policies implemented in the previous decade, in line with the increase of the right to education in the juridi-

cal and legal frameworks, particularly in societal settings where political democracy replaced authoritarian regimes. Furthermore, it should be recognized that such advances were also boosted by the recognition of education as a factor of social transformation and assurance of the full exercise of citizenship.

NOTES:

- 1 Direct public expenditure on public educational institutions plus subsidies to households and other private institutions.
- 2 International Standard Classification of Education.

