



Handbook of Education Systems in South America

Edited by:
Oscar Alberto Ramirez

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Figure 10.10: Numerous studies suggest that the intellectual and cognitive skills necessary for success in elementary school and beyond are established during a child's early years. While Latin America has made significant progress in lowering child mortality and malnutrition, educational chances for children aged three to six remain inadequate.

Figure 10.11: Governments have implemented a variety of strategies to lower cost barriers to lessen this danger and provide higher education options for the poor. At the same time, this raises concerns about access inequity and challenges related to effective targeting of underprivileged kids.

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Table 3.1: PIAAC proficiency levels for literacy.

LIST OF ABBREVIATIONS

BYOD	Bring Your Own Device
CNTE	National Confederation of Education Workers
COB	Central Obrera Boliviana
CTERA	Central Trabajadores of Education of the Republic of Argentina
CXC	Caribbean Examinations Council
DOI	Digital Opportunity Index
ERE	Emergency Remote Education
ESL	English as a second language
FNDE	National Fund for the Development of Education
GDP	Gross Home Product
GERM	Global School Reform Movement
GNP	Gross National Product
GUIDE	Guyana in-Service Distance Education
IADB	Inter-American Development Bank
INTE	National Institute of Teleducation
IRI	Interactive Radio Instruction
ISCED	International Standard Classification of Education
LAC	Latin America and the Caribbean
LMS	Learning Management System
MCT	Ministry of Science and Technology
MDG	Millennium Development Goal
MinTIC	Ministry of Information Technology and Communications
NALA	National Adult Literacy Agency
NGOs	Non-governmental Organizations
OAS	Organization of American States
OECD	Organization for Economic Cooperation and Development
PISA	Program for International Student Assessment
SEED	Scholarship for Education and Economic Development

TAL	Latin American Television
TIMSS	Trends in International Maths and Science Study
UB	Universidad de Belgrano
UN	United Nations
UnB	University of Brasília
UNESCO	United Nations Educational, Scientific, and Cultural Organization
USAID	United States Agency for International Development
UTPL	Universidad Tecnica Particular de Loja
UWI	University of the West Indies
YBI	Young Business International

SUMMARY

Enhancing the quality of education and universal access is the only way South America and the Caribbean can really reduce the inequality gap. This volume recommends creative policy formulation and commitment to adopt new technology, which is essential to ensuring that young people do not get lost in the education system. As UNICEF points out, well over 95% of youngsters in South America and the Caribbean are currently out of school. This has affected education tremendously, but also the society, politics and the economy, because education is closely related to all aspects of the community. Some of the topics covered in this book include; Chapter 1: Introduction to Educational Systems in South America, Chapter 2: Educational Indices in South America, Chapter 3. Literacy Rate in South America, and Chapter 4: Educational Attainment in South America.

Information and communication technology (ICT) tools can help children better prepare for the challenges of the future. But South America is not ready yet. Despite increased efforts to integrate ICT into education, minimal progress has been made. The digital divide simply means that most low-income students lack reliable access to computers or broadband Internet, and dependence on ICT may aggravate existing inequalities.

PREFACE

South America still lags back in education, notwithstanding having some of the richest countries in the world. The percentage of 10-year-olds not able to read and write may also have grown from 51% to 62.5%. This may be equal to 7.6 million students missing out on education. These figures indicate that governments must act without delay to reverse the scenario. Nations have to put together resources for the effective equipping of schools national, with crucial funding and equipment, these schools can make great progress in society.

Policies should focus on making sure that every school-going child has access to quality education, and improving the conditions for effective learning, which becomes the new normal in the coming years. In South America, fewer than 43% of primary schools and fewer than 62% of secondary schools have access to the internet for educational purposes. It's important to close the digital divide that persists, and to use the current Covid disaster to reexamine the education sector and make meaningful changes where possible.

The chapters covered in this volume include: Chapter 1: Introduction to Educational Systems in South America; Chapter 2: Educational Indices in South America; Chapter 3. Literacy Rate in South America; Chapter 4: Educational Attainment in South America; Chapter 5: Education Programs in South America; Chapter 6: Educational Labor Unions in South America; Chapter 7: Educational Gender Gap in South America; Chapter 8: Trends in Distance Education in South America; Chapter 9: Rise of Educational Technology in South America; and Chapter 10: Latin America's Future in Education.

In the long run, the intention is to establish education systems that are extra inclusive, effective and resilient. Different examples of effective education exist that can be institutionalized and replicated within the country. These consist of early warning systems that help identify students who are vulnerable to losing out in education in Chile, Peru, and Guatemala. Likewise, education management systems are generating a huge impact in Colombia and Uruguay. Additionally, the adaptive technologies utilized in Ecuador and the Dominican Republic have helped to offer practice on the right stage.

Without proper education, losses may be encountered in widening of the already massive socio-economic gap by up to 12%. Widespread losses in education, human capital and productivity may additionally translate into a decline in household income for the region by up to \$1.7 trillion, or approximately 10% of overall baseline revenue. Adding to these bad effects is that the rate of student dropouts may increase by around 15% due to the current pandemic, as well as the interruption of other essential services

that many students received in schools, such as free meals that fed approximately 10 million students in the continent.

These factors will have dramatic effects on the students' physical, cognitive, and emotional wellbeing. The volume suggests that if South America is to provide quality education for all, governments must do more to improve school infrastructure, as well as teacher and student conditions. Rural and poor communities are especially vulnerable to low education standards and must be protected.

Chapter 1

**Introduction to Educational Systems
in South America**

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1.1. INTRODUCTION

South American nations have gained immense headway in improving their schooling systems over the past few years. Governments have expanded spending on schooling, extended participation with the US, the World Bank, and other different sponsors, vowing to accomplish certain educational milestones set up through various stakeholders. South America is near achieving the Millennium Development Goal (MDG) of increasing global primary school enrollment rates, with 97% of children already registered to South American schools. The area is additionally making significant headway towards guaranteeing that once enlisted; students finish their basic education (Alzúa et al., 2015). Advancements in basic education have prompted an average literacy ratio of 96%, surpassing the global average of 87%. South America has additionally made strides towards achieving gender equality in literacy levels.



Figure 1.1: Primary education should be compulsory for all children.

Source: <https://www.thedialogue.org/blogs/2019/04/latin-americas-lowest-performing-education-systems/>.

Data on how regions are progressing in achieving the MDGs can be found at the UNESCO Statistics institute. In contrast to other locations, South American nations currently have more girls than boys enrolled in school. Lately, South American governments have applied various programs to improve the supply and interest for education in their nations, many of which have explicitly focused on vulnerable students and regions. As a rule, the achievement of those projects has pivoted upon the precision of their focusing on instruments in arriving at the least fortunate in society and disadvantaged learners. One ongoing review of schooling systems in South America proposes that giving free course readings and developing classroom libraries are the most affordable approaches to increase equity

in education. Other processes believed to be successful when executed in vulnerable regions are in-administration teacher preparation programs and training programs for children. While showing beneficial outcomes in some countries, free food distribution plans are not viewed as especially financially sustainable solutions for promoting education. As for demand, numerous nations in South America have effectively supported enrolments by giving compensatory cash to families in return for keeping their children in school.

Regardless of these new developments, South America's education falls behind the developed world and many non-industrial nations of equivalent status in East Asia. Students from South America will, in general, fail to meet expectations on global evaluation tests, in any event, when compared with comparable countries. Grades on public tests for students across all education levels remain low, and indigenous families have less admittance to quality schools than everyone (Warren, 2010). In Brazil, nonwhite students score altogether lower than white students from comparative socioeconomic backgrounds on public tests. Across South America, natives complete less prolonged education periods than non-natives and have lower monetary gain every time they complete their education. The gaps in admittance to quality schools are generally inescapable in nations with significant levels of pay disparity. Notwithstanding value issues, dropout rates are still high, especially in low income communities, with boys tending to have higher dropout rates than girls. This issue is especially unavoidable in the less well-off nations of South America, where dropout rates are especially high.

1.2. COLLABORATIONS FOR EDUCATIONAL EVIVAL IN SOUTH AMERICA



Figure 1.2: Sociocultural diversity is common in most South American schools.

Source: <https://blogs.worldbank.org/latinamerica/what-are-the-main-results-pisa-2018-latin-america>.

Scarcely any governments in South America contribute any significant portion of their budget on education suggested by global education specialists. In addition, most governments have given a lot bigger level of their financial education plans to financing grade and state-funded schools instead of secondary schools.

A new World Bank research recommends keeping everything under control, and an enrollment average of 85% is required; South America would have to double its efforts to achieve this goal. Since the beginning of the twentieth century, South America has taken extraordinary steps to conceive, organize, and deliver education.

Notwithstanding, the rate of progress in communities keeps on speeding up; this should be made to match with education standards. What comprised basic literacy in the past is presently inadequate for skillful investment in the post-modern world.

The bar for accomplishing certain fundamental goals of education in South American states is under the control of each government; they must be ready to plan and manage their political and financial frameworks to favor education policies.

The objective of education follows that it is fundamental now than any other time to exploit South America's vast human potential. Globalization is removing social delineation and is delivering a sort of friendly environment for education to many South Americans. This factor will get compounded both inside and across nations as public economies depend all the more intensely on one another in the era of globalization.

Since 1974, most South American nations have executed changes in their education frameworks. Probably the best accomplishment over the years has been that most citizens presently prefer public schools (Warren, 2005). However, even as basic education is presently accessible on an exceptional scale for most South Americans, these education services' nature has gotten more complicated.

Similarly, the outcomes of educational achievement for a great many countries are conflicting. It has been contended that until children from all socioeconomic levels achieve standards, equity of educational freedom won't be achieved. This implies that except if students who are moving on from school systems can compete on even ground, their odds for getting desirable employment will be restricted, just as their odds for an adequate income, financial and political stability.

1.3. HISTORY OF EDUCATION MODELS IN SOUTH AMERICA

Since Horace Mann launched the first U.S. government-funded school in 1839, the possibility that all people ought to be educated has been discussed and acknowledged throughout the Americas.

In 1847, Domingo Sarmiento, a very esteemed Argentinean author, and instructor met Horace Mann and went through 2 days of serious discourse concerning the education sector. This 2-day meeting planted the seeds for state-funded schooling in Argentina following Sarmiento's ascent to the presidency in 1868.

The educational vanguard started developing teaching colleges and schools throughout Argentina, yet invested energy in Chile and Paraguay, impacting strategy for the building up government-funded training in those nations. Just like Mann had impacted Sarmiento, the Uruguayan humanist and lawmaker José Pedro Varela planned a meeting with Sarmiento, and the light was passed.

Even though state-funded education had effectively started in Uruguay by 1820, Varela advanced the standards of free state-funded schooling and worked to set up the basic framework before his passing in 1879. Four decades later, José Vasconcelos essentially extended government funding to schools in Mexico.

Different nations, for example, Costa Rica and Venezuela, before long took action accordingly. Moreover, as a feature of the communist movement, Cuba set up government-funded education, and in the mid-70s, Juan Alvarado Velasco radically transformed the education sector in Peru. Since the turn of the twentieth century, the possibility that all residents ought to have equal rights to free government-funded schooling turned into a need in the Americas (Valencia, 2005).

World War II contained the seeds for the foundation of different bodies and commissions intended to reproduce education strictures across all UN member states. Their point was to advance peace on a worldwide scale. In 1945, UNESCO was established, and later in 1948, it suggested that the 37 partner nations make "free basic education mandatory and universal." As for South America, the Organization of American States (OAS) gave a comparable proclamation the same year.

1.4. GOVERNMENT-FUNDED EDUCATION IN SOUTH AMERICA POST THE 1950S



Figure 1.3: South American schools are still underfunded compared to their counterparts in developed countries.

Source: <http://shannononeil.com/blog/conditional-cash-transfer-programs-worth-the-price/>.

Because of their developing acknowledgment that the models utilized since the 50s weren't feasible, Latin American governments attempt to grow their educational structures to offer universal access at the rudimentary level. Most structures were defined by low consumption per student and reduced effectiveness in the delivery structure, which prompted high dropout rates. However, secondary and higher education structures were all developed to a lesser degree because there was less access. There would, in general, be a lot greater ratio of students in higher education, however, with low pass rates and low rates of investment. While teaching structures were attempting to grow admittance to higher numbers, discussions were still present on the possibility that schooling equity was unique to equitable education. Could all students be managed using similar education programs, and comparable outcomes be accomplished? If otherwise, for what reason was it that a few students reacted better than others to similar circumstances. In the mid-1950s, specialists, professionals, and policymakers investigated this issue in the US and South America. They made discoveries to improve the learning experience.

Three levels of research examined the following: (1) The connection between social disparity and resultant educational imbalance. (2) Educational changes for improving schools, and (3) The criteria for recognizing viable schools. The result of such studies has prompted numerous new educational designs and projects in South America. To address key social imbalance promoting educational disparity, teachers have developed new practices in subfields, for example, basic or liberal instructional methods (Verger et al., 2016). Some likewise utilize the term groundbreaking teaching method since the emphasis is set on changing the basic education system to most completely cater for the less advantaged students in the general public. Policymakers have reacted to this reality by making compensatory programs pointed explicitly at students most at risk of failure because of regional, racial, or socioeconomic segregation. Prodded by innovations, social developments, and economic factors, changes in education systems started to arise all through the Americas during the 60s and 70s. Analysts started to examine these changes. In education, a few specialists started to apply system hypotheses to identify changes in establishments. Other educational analysts began investigating what made a few schools work more effectively than others.



Figure 1.4: Poverty remains a barrier to education access in South America.

Source: <https://www.timeshighereducation.com/world-university-rankings/will-covid-19-trigger-new-model-higher-education-latin-america>.

These scientists were not intrigued by the social issues encompassing education in that capacity, like the learning experience for those generally

in school. Most discussions were fixed on how viability could be acknowledged and estimated. Student achievement was the litmus test for the research because of different factors; it was used to determine if a school was successful or not. Having the option to quantify student achievement and analyze it across schools, educational systems, and nations empowered educators and strategy makers to settle on better choices about where to put their resources. This prompted what is presently known as the standards development. Before the finish of the 1970s, the greater part of countries within South America bought into UNESCO's policy goals anticipated to usher humanity into the new thousand years. (1) Universal access for the initial 8 years of basic education; (2) Decrease in ignorance; and (3) Enhancements in quality and proficiency in schooling structures. These policy needs and projects, be that as it may, turned out to be genuinely sabotaged by the economic crisis that affected most South American nations starting during the 70s.

Obligations from the Vietnam War caused conditions that constrained US President Richard Nixon to make the economy running. This activity tossed the overall socio-economic system into disarray. For the rest of the 70s and 80s, dwindling trade influenced the provisions of funds to support South American schools. Financing costs on education thus soared, causing a kind of emergency in these countries. Poor nations in South America were especially defenseless because they had borrowed heavily to support infrastructure improvement and government projects. As indebted nations could not pay back their loans, government funding for schools eased back or stopped. Joblessness developed as laborers were laid off from work. Many South American families could no longer take their children to school (Velázquez Barriga, 2020).

Because of this emergency, South American governments had to slice their schooling spending plans by looking for practical cost-saving approaches. Some educationists began investigating decentralization methods both at the public and school levels. Their thought was that this would lower budgetary spending and improve education efficiency. Different countries started carrying out pilot tests on the framework, focusing on regulatory and fiscal effectiveness. Throughout the Americas, policymakers and teachers started asking themselves the best plan for their limited fiscal resources to yield the best outcomes. From 1980 to 1990 was referred to in South America as the Lost Decade since education frameworks had to veer away from the arrangements set up during the 70s. Strategy measures in South America at that point moved from uniformity and value to quality. In 1990, UNESCO

held a world education forum in Jomtien, Thailand called Education for All. The gathering was to commit once again member nations to the strategies recognized during the 70s. Again, improving every nations' residents' access to universal education turned into a focal point. Two new needs were additionally added, including creating economic freedom and advancing equity in schooling frameworks. In the 1990's, the overall enrolment rate in primary schools jumped to more than 90% for most nations around the globe and roughly 81% in South America. By and by, today, the most vulnerable groups with minimal access to education are street and migrant kids, those with special needs, and native/indigenous kids occupying remote areas.



Figure 1.5: Bolivian student working on a science project.

Source: <https://www.telesurenglish.net/news/Bolivia-1st-in-Education-Investment-in-South-America-Report-20171024-0018.html>.

In 1998, the leaders of South America met in Santiago, Chile, to talk about policy approach needs. All concurred that education was the main need for their countries. Different strategy approaches were identified to reduce poverty using compensatory approaches. Rosa María Torres, former Program Head for South America and the Caribbean at UNESCO, researched education achievements throughout the 90s. Her discoveries included the following:

1. The reform agenda was revived after economic challenges had interfered with such drives during the 80s.
2. New sources of financing were recognized.
3. New commitments were made to promote advancement and experimentation in new ventures.
4. A spotlight was made on vulnerable groups and issues identified with them, including gender disparity.

Notwithstanding, the outcomes were restricted to the fundamental training level and missed the mark concerning the ideal vision of change at all levels. In April 2000, UNESCO held another World Education Meeting in Dakar. The intention was twofold: to report a 10-year assessment of Education for All and to commit once again to the program and further concede to the accompanying milestones as set out in the accord. (i) Expanding and improving youth education programs, especially for the most vulnerable ones; (ii) Guaranteeing that all kids, especially girls, those living in hardship conditions and ethnic minorities, have access to good quality schools; (iii) ensuring the education needs of every person is met through fair admission policies.

Uniformity of access keeps on being a notable theme for quality education, particularly for disadvantaged kids. Gender equity is currently recognized as a significantly more notable issue as gaps in accomplishing this goal in specific areas still exist. In November of 2001, UNESCO went above and beyond by providing a Universal Cultural Diversity declaration embraced during their 31st meeting. This announcement was made to perceive the significance of first language education and socially viable practices in schooling (Vanegas, 2003). Through this affirmation, UNESCO and its partner nations conceded to the advancement of language diversity and different socio-cultural perspectives to improve education. They accept that the present education system should conform to the global economy (UNESCO, 2004b). Unmistakably, progress has been made in South America in the improvement of government-funded schools. Most nations throughout South America have achieved significant levels of school enlistment starting from the 1st grade.

One may subsequently consider that the primary objective for achieving education freedom has been reached. In any case, it is imperative to consider a more extensive meaning of education freedom to comprehend what is truly happening. What occurs preceding arrival from the primary level and what occurs after entering 1st grade is where most of the data regarding a disparity in education emerges. Some say that equal access is adequate, yet others contend that using it is hard to achieve due to socioeconomic disparities.

The rule of equal access to education disfavors social minorities by providing minimal freedoms worth noting. Access to school admission also remains a challenge, making way for another level of disproportion which cannot facilitate progressive changes in society. Education freedom gives

room to depict the current education conditions in South America. The focal part is to restructure encounters for students in highly purposeful ways that encourage development and advancement. Such encounters are interwoven and reliant upon each other to achieve the ideal level of efficiency. Scholars caution against being deterministic when they demand that education models ought to be seen as a set of likely pathways to progress. Notwithstanding, everyone has both financial and social conditions that may, over the long haul, fundamentally affect the nature of education that they receive—either positively or negatively.

1.5. LITERACY RATES



Figure 1.6: The literacy rate in South America is still low.

Source: <https://www.brookings.edu/blog/education-plus-development/2020/05/26/education-in-the-time-of-covid-19-reflections-from-the-charcha-2020-forum/>.

Illiteracy rates in South America dropped from 34% in 1960 to roughly 13% in 1995. Unmistakably, this achievement in education has empowered most South Americans to pursue education, however, just at the very basic level. Anybody can get an education; nonetheless, many people don't comprehend what they read. A UNESCO test is given to third and fourth graders throughout South America (consisting of 13 nations) showed that 3 out of 4 kids at the primary level didn't comprehend what they read. State-funded schools have an education system unfit to compete globally,

restricting their capacity to adjust to modern innovation. It implies that the current education levels won't fulfill the future workforce needed to empower South American communities. Scholars mentioned that at the turn of the new millennium, education levels in South America were low, and governments must work harder to make it more inclusive to everyone (Torres & Schugurensky, 2002).

Additionally, most South American nations don't take part in global testing, making cross-territorial evaluation difficult. This nonparticipation influences resource distribution in a big way. Anyway, the few countries that do take an interest will, in general, be the ones that are further underdeveloped in their journey to education freedom. Researchers found that public and global tests from the last part of the 1990s were alarmingly low. For instance, Colombia was position 40 of 41 in the 1996 Trends in International Maths and Science Study (TIMSS) test. In 1999, Chile completed 35 of 38. In locale-wide tests controlled by UNESCO (with less scholarly thoroughness than TIMSS), while Cuba improved though not to a more modest level of absolute government expenditure going to the education sector.



Figure 1.7: Bolivian students drawing a butterfly in class.

Source: <https://lab.org.uk/unesco-declares-bolivia-free-of-illiteracy/>.

Chile and Colombia in South America also scored poorly on tests, suggesting that different nations must do more to remain effective in the education sector. These low outcomes can be attributed to both internal and external factors affecting the educational systems. Other variables would include poverty, low execution of changes; government services actually

working under old models; and minimal acknowledgment of innovation in education. Other factors include The nature of teacher preparation, school administration, and training frameworks. Even though it is improving, the education labor force is for the most part portrayed by: low degrees of preparation, low degrees of demonstrable skill, low compensation, and less motivation for development.

Moreover, there are few expectations for students as far as content and ability are concerned. By and large, there is a low degree of school independence and responsibility. There are additionally few resources compared with private schools, which often seem to have more resources to spend per student. An altogether bigger portion of the populace in South America is illiterate, so additional educational funding would be required to reach satisfactory levels. The area's normal rates of the GNP are too low to even think about narrowing this hole. Governments will, in general, but fewer resources into primary schools and put substantially more into financing the college level due to the more prominent political clout of colleges.

In comparison to private schools, private schools often spend 5 to 10 times the rate for each student. Expenditure has increased, but public investment per student is still minimal and focused on the tertiary education sector. At the same time, the gross national product (GNP) ratio allocated to education in Latin America is higher than in some developing regions (Staab, 2010). A large part of the population in the area is still in the school-aged bracket, so more expenditure is needed to reach the appropriate level. The average percentage of the region's gross national product is too low to close this gap. Because universities have greater political influence, the government tends to underinvest in primary and secondary education while investing more funds at the college level.

Because South America is profoundly diverse in its sociopolitical and economic frameworks within every country, the average level of education in every country and its human resources vary considerably. Less than 33% of the South American labor force has finished the 12 years of schooling required for reasonable education. This factor, be that as it may, is anything but an exact marker of the conditions happening specifically across nations due to fluctuating levels of economic development. For instance, during the 1990s, Guatemala showed that roughly 50% of its workforce above 25-years-old or more had no formal education by any stretch of the imagination. However, nations like Argentina demonstrated an average educational level surpassing 7 years.

Overall, the average degree of education in South America remains low compared with other regions. In 1995, only four South American nations had enrolments at tertiary levels at or above half of the populace: Chile (55%), Peru (53%), Panama (51%), and Colombia (50%). It is critical to call attention to the impacts of new educational drives to expand the average number of years in school just show up in the long term, as students are typically followed up throughout their education, permitting them to finish their studies.



Figure 1.8: Rural communities lack access to educational resources.

Source: <https://www.unicef.org/lac/en/stories/peruvian-amazon-loudspeakers-help-remote-learning-continue-indigenous-communities>.

By 1995, the average period of education for South America was around: 9.5, 7.3, and 5.4, consecutively. South Americans have less formal education structures than their counterparts in Asia and other parts of the world, extending the gap. Education at the provincial level is a lot lower than what shows up in public. During the 1990s, just about half of the individuals who started 1st grade completed primary school. Otherwise, even though practically all youngsters start 1st grade, by the 4th grade, just 60% remain in school. In different countries, between a quarter to half of all students never make it to 5th grade. A quarter or more of the kids who begin 1st grade don't make it to 2nd grade in Colombia. By the 10th grade, just 15% of students stay in school.

Graduation from secondary school, as one would assume, stays at an incredible low in South America. In 1998, of those who proceeded onward to higher school levels, only 50% were Chilean and 33% Mexican. On the

other hand, poor family students spend twice as many years in school as rich homes. When students graduate and afterward achieve the retirement age, college graduates may achieve more than their non-educated counterparts. This implies that the knowledge gap intensifies. Indeed, even as education has transformed altogether, the nature of administration remains poor no matter how you look at it; those who feel the intensified impacts of the shortcomings like education are poor families; that living upcountry; young women; and certain racial and ethnic groups (Schoenig, 2013). By and large, poor students go to low quality government-funded schools that conduct only 3 to 4 hours of the class day by day. Then again, students from mid to upper levels of education will, in general, go to private schools that offer 5 to 6 hours of training every day, and along these lines, show fundamentally higher accomplishment. Besides, the amount of people living within the average poverty line has grown since the 1990s to 36%. This represents around 204 million individuals but doesn't represent the large numbers not captured by statistical agencies. Because of the way that, South America is highly diverse in terms of socio-cultural, political, and economic systems found in every country; each country has its own story to give when it comes to educational progress.

1.6. DEVELOPMENT TRENDS IN SOUTH AMERICAN AND CARIBBEAN COUNTRIES



Figure 1.9: South American student taking notes in class.

Source: <https://theconversation.com/why-cuba-is-an-education-success-story-and-what-it-can-teach-africa-50211>.

The UNDP index shows that throughout the years, a large number of South American and Caribbean countries with comparable records pass from a “medium” rate of human development to “excessive” have emerged. By 2012, the economic situation of Latin American and Caribbean nations have changed into exceedingly favorable conditions, with a sizable and regular increase in line with the capita gross home product (GDP), which was only interrupted following the global financial disaster that started in 2008. Before then, South American countries had anticipated an average GDP increase of about 5%. This financial growth made it viable to expect a continuation of the beneficial trend of education in the area post 1990s – and this was certainly the case in nearly all global locations around the region. As a result, the average per capita GDP in the South American nations with statistics rose from the approximately US \$7,200 in 1990 to US \$8,400 in 2000, reaching \$9,600 in 2010. Inequalities in some of the countries truly remain dramatic and tend to persist. In South America, even the most egalitarian nations (Argentina and Uruguay) have Gini coefficients of around 0.45. Between 2000 and 2010, the average number of people with incomes below the poverty line dropped from 43.9% to 35.4% in South American nations.

In comparison, Bolivia, Venezuela, and Argentina nearly halved their poverty rates throughout the same period. Ultimately, South America and the Caribbean have witnessed huge demographic changes in recent decades. Nearly all of these countries have witnessed a demographic transition, whereby population growth slows down and the populace ages in relative terms, while others are in the superior ranges of this process. This means that the number of children (and an increasing number of young people) of school-age is declining about the rest of the populace. The effects of this decreased capacity call for better schooling conditions in South America (Somers et al., 2004).

In broad terms, the UNDP Human improvement Index suggests that South American and Caribbean countries with comparable data pass from a “medium” stage of human development to “high” in step with the UNDP class. Through 2012, Haiti becomes the only country classed with a low degree of human development across South America and the Caribbean; the region’s consistent development in the gross domestic product (GDP) makes it promising as far as education is concerned. This monetary boom made it feasible to predict a continuation of the favorable trends experienced by using most of the location’s international locations since the Nineties – and this was indeed the case (albeit with full-size variations) in nearly all countries within the area.

1.7. THE DAKAR EDUCATION ACTION PLAN



Figure 1.10: The Dakar educational plan promotes disability-inclusive learning.

Source: <https://www.devex.com/news/opinion-the-urgent-need-to-plan-for-disability-inclusive-education-94059>.

The Dakar framework emphasized the need for governments to grow their financial commitment to education. On average, South American and Caribbean countries did improve public spending on education as a percent of GDP (growing from 4.5% in 2000 to 5.0% in 2011 – an upward thrust of 5% points – to demonstrate the concern towards the average education expenditure in South America and the U.S., which was around 5.6% of GDP in 2010). However, this factor does cover principal variations within the area in terms of expenditure and the fashion course. In truth, different countries with comparable information did not submit a high quality trend for public spending as a percentage of GDP; however, this dropped between 2000 and 2011. Even as in some countries, public spending on education did not exceed 3 % of GDP in 2011, other nations had around 6% or better (Senechal, 2010). Because countries differ considerably in terms of the size of the state on the subject of the financial system, a more appropriate indicator to evaluate the economic precedence that governments assign to education is to examine education spending alongside general public expenses. Intraregional disparities are also quite prominent; for example, Costa Rica had an education budget representing a minimum of 20% of the state's finances, while this figure was around 10% in different countries.

It is essential to take into account funding differences between the different education cycles. In the case of basic education training, public spending in line with education as a GDP percentage rose slightly in the region all through the preceding decade (from 14.1% in 2000 to 16.1% in 2010). Cuba became a particularly impressive case, as it almost doubled spending in keeping with education, with figures representing nearly 50% of per capita GDP by 2010. The country's average expenses on education turned were channeled towards secondary education within the beyond a decade, as spending at the latter rose from 16.4% of per capita GDP to 19.6% between 2000 and 2010.

As for secondary education, the average public funding was lowest in the Dominican Republic, with less than 10% per capita of the GDP invested. Furthermore, public spending per student in higher education during the last decade plummeted. Average public funding in higher education per pupil also plummeted, from 43.5%, consistent with per capita GDP in 2000 to 29.7% in 2010. Average public spending on higher education according to in 2010 turned into double the equivalent for number one training. In terms of private education spending, UNESCO estimates that it represented a mean of 1.2% of GDP across the region. In places like Guatemala and the Dominican Republic, the most spending was on private secondary education in 2010. Private spending across all tiers of education rose to 16% of the overall sum in 2009, while Chile's stood at 41% (which became the best of all South American nations).

It's critical to remember that investment differences vary across diverse education cycles. In the case of education, average public spending in keeping with pupil ratio as a percent of per capita GDP rose during the previous decade from 14.1% in 2000 to 16.1% in 2010. Cuba was a particularly interesting case, as it nearly doubled spending on primary education, with figures representing nearly 50% of per capita GDP in 2010. The region's public spending goals were replicated for secondary within the decade, as spending at the latter rose from 16.4% of per capita GDP to 19.6% between 2000 and 2010 (Robert, 2012). As for secondary education, spending doubled within the same duration to reach a public investment level consistent with modern education standards (Ross Schneider, 2021). Ultimately, there has been a negative trend in public spending consistent with education expenditure during the last decade. Public investment in higher education per student plummeted in many regions from 43.5% in line with capita GDP in 2000 to 29.7% in 2010. Despite this trend, average public spending on education remained consistent in 2010 but changed into

double or equal the number later. As for non-public education expenditure, UNESCO estimates that it represented an average of 1.2% of GDP in 2010. In 2009, while Chile posted 41% (which become the best of all member nations). It's also well known that non-public school expenditure tended to be unequally dispensed.

1.8. EARLY CHILDHOOD CARE AND EDUCATION



Figure 1.11: Early childhood education is the basis of learning.

Source: <http://www.educationbeyondborders.org/m/blogpost?id=2213732%3ABlogPost%3A83781>.

Growing and improving early childhood care and education, particularly for the most disadvantaged kids, should concern South American schools. Living conditions and fitness levels in early childhood increased dramatically over the past decade across most South American and Caribbean nations. Similar to the above-stated reduction in poverty, this became evident in the reduced infant mortality rate among children below 5 yrs old, which went from a mean 32 out of each 1,000 children in 2000 to 19 in 1,000 as from 2012, that is a particularly effective change in comparison with other global regions, whereby the corresponding decline was from 74 to 48 (UNESCO 2014). Above and past education expenses, South America nevertheless has a high percentage of children with malnutrition and stunted growth: In 2010, around 16% of children below 5 had slight to extreme

stunting (serious malnutrition which affected 3% of the region's below-fives in 2010, as compared with 4.8% in 2000). As for educational opportunities of kids aged 3 to 6, South American and Caribbean countries have tended to make slow progress in improving children's admission to preprimary education. The average net enrolment ratio in preprimary education jumped from 52% in 2000 up to 66% in 2011. However, a few important variations, such as positive trends in 3/4 of the South American nations, were observed from recorded data. South America has a wide variety of socioeconomic conditions, varying from nations with pre-primary coverage of roughly 90% to others where the coverage is around 40% (Poppema, 2009).

Findings show that national variations in school enrolment rates in 2010 were associated with socioeconomic and educational factors. In particular, countries with greater financial resources (measured by capita GDP) tend to enjoy better primary school education coverage. But, other social improvement indicators are also essential, even when wealth variations are managed. For example, nations with a larger rural populace and higher infant mortality rate experienced lower schooling enrolment at the primary level. Population composition in terms of age bracket is also relevant, as countries with a higher percentage of pre-school age population tend to have reduced school enrolment rates. National guidelines also are applicable factors in explaining variations in pre-faculty education coverage. On average, when countries spent highly on education (measured as a percentage of GDP), their net rates of primary education enrollment increased.

Despite regional developments across South America, there is considerable inequality in terms of access to primary schooling. This affects the populace that would probably have accessed the best level of education: Children of lower-income families, those in rural regions, and indigenous people. Ultimately, most pupils become affected by education policies, whether good or bad. Consistent with estimates, in 2015, the average regional gross enrolment ratio in pre-primary education was around 81%. To place South American countries in a global context, a regression analysis can be used to estimate whether or not the region as a whole is faring better; results show that progress was much less quick compared to other nations within the global context between 2000 and 2010.

Findings imply that, between 2000 and 2010, the net pre-primary enrolment ratio in South American and Caribbean countries grew more than in other world regions (having controlled for relevant characteristics). As a part of the policy dialogue, it's important to distinguish between long-term

and short-term education goals. For youngsters aged zero to a few years old, techniques for coping with malnutrition and stunting should be proposed consisting specifically of measures to boost breastfeeding fees and the use of meal supplements. Parents should be actively engaged in the education process since education is positively related to their children's health and wellbeing. For children aged 3 to 6, the focus should be on increasing the number of schools and providing exceptional educational facilities; therefore, efforts must additionally be made to increase admission rates for children in vulnerable conditions.

Basic education and care consist of high-quality existing programs and services, guaranteeing better returns for the disadvantaged. In South America, the suitability of such programs cannot be guaranteed, as there are regulations that deal with children's needs (particularly the youngest) in a multidimensional way. South American countries must additionally make sure that every kid, especially those facing tough economic times and those belonging to ethnic minorities, has access to compulsory primary education (Arrueta & Avery, 2012). Universalization of education is certainly the primary goal of global education. In this regard, South America had reached a standard high-quality level, with an average net basic education enrolment ratio of 95%. But, the next decade changed into a story of uneven progress and robust contrasts among countries, which means that the goal of primary education must consider the outcome. First, the average net rate of enrolment in primary school stagnated (93% in 2011), which means that nations had made no extra development inside the decade ending 2011. This lack of development reveals rather worrisome trends:

Secondly, throughout South America, student repetition rates in 2010 fell at a median of 5% in South America and Caribbean nations (compared to 6.8 % in 2000). In different terms, every year, around 1 in 20 students stayed within the same grade. Because of repetition and late entry into the school system, in 2010, the region's average percentage of over-age students in education stood at 9% (even though the rate was around 21% in Colombia, Nicaragua, and Brazil). Thirdly, the region has made great progress in reducing school dropout rates, with the numbers falling from 13% to 8.3% between 2000 and 2010. Child labor is, however, quite rampant, affecting communities due to high dropout rates. The general trend in the region concerning school retention is barely optimistic, with the average retention rate for fifth-grade students rising from 84.7% to 87.6% between 2000 and 2010. According to analyzes, countries with higher income rates had higher average school retention rates for fifth graders.

But, the greatest inequality in primary education remains related to the socioeconomic factors of education, with defined progress made over the past decade. In 2010, while an average of 96% of youngsters aged 15 to 19 from the top class had completed primary education, around 73% of the poorest population groups had done just about the same. In different regions, pupils from the poorest communities were more likely not to complete primary education than the richest families. Based on official statistics, according to recent estimates, the gross national enrolment rate is predicted to be 90% by 2015. There's a slowdown in this regard. About 5th-grade retention rates, findings suggest that, between 2000 and 2010, South American and Caribbean countries doubled their average 5th-grade entry fee to around five percentage points higher than other international countries – having control for relevant educational factors. The region's most important task in education is to make certain that those living in rural areas, abject poverty, or indigenous communities can access good quality education. This cycle of education means the acquisition of vital skills for advancing on to secondary school.

The problem facing universalization of primary education involves making sure that efficient free primary education is provided (along with not just fees but additional oblique prices), ensuring school entry at the right age, preventing grade repetition, and decreasing dropout rates so that pupils benefit from their primary education, and facilitate the transition to secondary school. The characteristics of the student's home environment and education provision have an immense impact on the prospects of repeating a grade or dropping out. At the same time, those living in rural areas or from an ethnic minority are more likely not to finish primary schooling (Patron, 2006).

Over the past decade, net enrolment rates in South American primary schools have remained at 94%, supporting the primary mission to have the best primary education for marginalized groups. This is vital to reducing social inequality to improve the education system. Indeed, social segregation is based totally on income, geographical location, and local factors in schools. Along with poverty, one of the principal reasons for dropping out is child labor, which today impacts many kids throughout South America, limiting their right to proper education. In this sense, it's critical to establish curricula that might apply to the specific needs of children, in addition to enforcing rules that take into account the unique needs of each region. One element that affects the delivery of primary education – especially for poor households – is the duration of studies. The average level is 4 to 5 hours per day, which is much less by four hours than other international locations.

Tackling the problem of low contentment and dropout rates requires systems that provide critical support to families, mainly for children with studying problems – to address problems that cause them to go to school past due time, absenteeism, or grade repetition. The education system also needs to be reinforced to accommodate pupils with special needs into regular classrooms.

Tackling the hassle of low fulfillment and dropout rates in number one school requires policies that provide indispensable aid to families, particularly for youngsters with getting to know difficulties – that allows you to deal with the problems that lead them to enter school overdue, end up absent or repeat grades. The teaching profession also wishes to be reinforced to welcome college students with special desires into regular classrooms

1.9. SECURING SECONDARY SCHOOLING

Schools need to make sure that the needs of all secondary school students are met via equitable distribution of resources and lifestyle-based programs. Generally speaking, secondary schooling is not just a priority but a necessity, and there may be a transition from one cycle to the other. This is important because secondary school growth is restrained since primary education receives most funding and resources. As may be seen, the numbers of primary educated children multiplied considerably in South America, where they now constitute on average over 90% of the literate population. But primary education alone is not enough for sustainable development. In this sense, the South American countries must learn how to transition their students from primary to secondary schooling.

Furthermore, many countries (especially those that started with lower enrollment rates) posted significant progress in this regard over the past 10 years, including the striking case of Panama, which increased its primary to secondary transition rate from 64.5% to 98.8% between 2000 and 2010. However, the region's level of secondary education coverage remains intermediate and, notwithstanding the exceptions, did not progress significantly during the past decade. Indeed, an analysis of the net secondary education enrolment rate clearly shows that the challenge is even more significant (Payne et al., 2002). Even more, several countries experienced major setbacks in secondary education coverage during the past decade. In contrast, rapid progress took place in several other countries, like the Republic of Venezuela, which gained up to 20%.

Overall, in 2011 South America still had intensely variable situations in terms of secondary education, ranging from net rates of below 50% in some countries to rates higher than 80% in others. Net enrolment rates in secondary education. The factors behind this considerable variability in the net secondary enrolment rate are a combination of context factors and internal features of the education system itself. According to analyzes, secondary education coverage is positively associated with increased national wealth—the net secondary enrolment rate increases in direct proportion to per capita GDP. However, economic differences are far from providing a full solution. Countries with a higher proportion of secondary-going students' population tend to have lower net rates of secondary enrolment since the challenge facing them is relatively larger. Also, countries with higher net primary enrolment rates tend to have higher secondary enrollment rates since a higher number transition to this level of education. When all of these elements are considered, South American countries do not stand out from others regarding the net secondary education enrolment rate as from 2010.

Education inequalities among nations also combine with the inequalities within individual countries. Especially in line with family profits, and quintile ranges from 93.6% among the richest to 78.9% among the poorest. This gap additionally varies extensively amongst South American locations: within Venezuela, Chile, and Colombia, the distinction among the very best and lowest income quintiles is around five percentage points, while in other countries like Guatemala, the difference is over 30% factors. Grade failure is a chief impediment in secondary schools: on average, nations did not reduce the repetition rate in secondary education, which stood at 5.9%. What's more, in some nations the number of failing students rose sharply. Apart from the repetition rate, the persistently high failure rate remains a concern for South American countries.

There are fundamental variations in secondary school education, to the detriment of students from lower-wage families, ethnic groups, and rural regions – and this will increase inequality across international locations. In this experience, the transition from primary to secondary education is among the essential factors that must be addressed. Taking the average for the region in entirety, around half of children born between 2001 and 2003 have completed secondary training (Parra, 2009). In the countries with comparable data, a median of about 53.5% of children aged 20 to 24 (i.e. born around 1986 to 1990) had finished secondary schooling – which is slightly better than the ratio for those between 25 to 29 who have not proceeded with their education, and 9% points higher than the ones born 10

years earlier. The region has extraordinarily high and chronic inequality in terms of socio-economic development.

In 2010, an average of 21.7% of those aged between 20 and 24 from the poorest families had finished secondary schooling. To compare, 78.3% of those within the richest quintile had finished their education. Primarily on the pattern, a projection of the likely net secondary enrolment rate has steadily progressed. It is moreover envisioned that by 2015, the average secondary enrolment ratio within South America will grow to be 77%. Although controlling other variables, South American nations were making substantially greater efforts than other regions in schooling. The purpose of education in South America is to consolidate growth, particularly incorporating the disadvantaged groups.

However, this increase goes hand in hand with modifications in the identity and nature of secondary schooling. Until such modifications occur, equality goals may be significantly compromised. In recent times, the primary transformation factor has been the definition of secondary education: it's far now discernable as part of every citizen's primary education, not just the privileged in society. Grade failure is a primary impediment in secondary schooling: over the last decade, on average, the region's nations experienced a decline in secondary school education, which remained at 5.9%. Whereas in some countries, the rate of failure among students rose drastically, as in Uruguay, where it stood roughly at 12.9% to 14.3% throughout the decade. The repetition fees recorded there already being more than double the standard average. The persistently excessive failure fees combined with high drop-out rates in secondary education is a burden that must be tackled.

There are predominant differences in secondary school education accessibility, to the detriment of students from lower-income households, ethnicities, and rural areas – and this, in turn, will increase inequality within nations. On this account, the transition from the first to the second cycle of education is among the vital factors needed to avoid losing out. Considering South America as a whole, around half of students from the region have not completed secondary schooling. The fundamental objective of secondary education is amended, with the emphasis being placed on gaining lifelong knowledge. In other words, the idea is to increase basic competencies to a higher level to allow for more impartial studying; providing extra space for college students' character interests, motivations, and talents (as they grow in their education journey); and making stronger socialization and cultural integration factors that have re-emerged as essential elements of complicated

and multicultural present-day societies. Defining secondary education as a well-known right and a part of primary education has improved the mass education process. This implies having to tackle issues of right of entry to, progress, and retention, which form the basis of a successful education plan. The prevailing trend is to offer customary, free, and non-selective secondary school access with no front exams in terms of access. For instance, using grade rating to best control or academically assist those struggling with education (Nygreen, 2016). Curriculum changes must also be done to make education relevant to South America's developmental goals. One alternative has been to modify the secondary school curriculum to consist of new subjects inclusive of data and communication technology, citizenship development, promoting healthy living, sustainable development, and the generation of entrepreneurial ability, to name just a few. The mission of education should be to enhance various aspects of education and ensuring excellence, so that is acknowledged. Measurable education can be achieved by any means possible, mainly in literacy, numeracy, and basic lifestyle skills.

The fundamental point of basic education, therefore, would be ensuring a long-lasting education continuum. The goal being to develop essential skills to a higher level and creating more autonomous and progressive learning; students should also be allowed to pursue their aspirations and goals (as they grow into a more diverse populace than previously); apart from fortifying socialization and social mix angles which have reappeared as urgent pieces of the dynamic and multicultural modern-day cultures. Characterizing education as a fundamental right for students and basic schooling can improve the basic learning cycles. This suggests handling issues of access, progress, and sustenance, which are essentials for education. As far as access is concerned, the overarching pattern is to offer a widespread, free and non-partisan primary education for all with no placement tests. For instance, the utilization of evaluation redundancy as a method for quality control must likewise be limited in light of the abundance of proof where it's academically ineffectual and is demonstrated to increase the potential outcomes of early school leaving.

A developing strategy is to easily manage school-leaving rates by having fewer students moving out of the education cycle or reducing the rate of students who have failed to progress due to financial issues. Nowadays, educational program changes have indeed gotten more significant. One choice has been to extend the optional school educational plan to include new subjects, such as utilizing data and correspondence technology, citizenship

advancement, advancement of students living with disability, sustainability, and allowing for an enterprising spirit.

Teaching arrangements should be pointed toward reinforcing professional schooling standards and raising education status to improve social stability. The test of education quality is on improving all aspects of the nature of education and guaranteeing equal opportunity for all so that perceived and quantifiable learning results are accomplished by all, particularly in literacy and numeracy skills. The focus on education is fundamental. It includes the successful advancement of students to practice their skills and abilities, get involved in the public space, and have a noble educational experience. The concern for education quality is applicable in South American and ought not to be viewed as a supplementary factor comparable to expanded inclusion (Mizala & Schneider, 2014).

The primary goals of secondary education are being modified as a consequence, with the prominence being placed on the general learning continuum. In other terms, the concept is to increase fundamental skills to a better stage to enable more impartial ongoing education; offer more space for student character interests, incentives, and talents; and reinforce sociocultural integration components which have re-emerged as critical components of our complicated and multicultural contemporary societies. Describing secondary education as a standard right and part of primary schooling has bolstered the massification process, which implies having to address access, retention, and progress, which might be the fundamentals of the schooling system. As for the right to admission, the ultimate goal is to provide a widespread and non-selective education without any front exams. For example, they use grade repetition to provide quality control and academic guidance to extensively control the wealth of proof.

A developing policy matter is to handle early school leaving problems, emphasizing the long-term reading continuum. In other terms, the idea is to grow basic skills to allow extra unbiased ongoing knowledge of; provide extra room for students to pursue their goals, motivations, and abilities; giving a boost to socialization and cultural integration components which have re-emerged as critical components of our complex and modern-day multicultural societies. Defining secondary education as a standard right and a part of education has strengthened the education massification process. This means addressing access, progress, and retention troubles, which might be the fundamentals of the education system. In terms of getting the right of entry, the goal is to provide a general, free, and non-selective education

system without any front tests—for instance, the use of grade repetition as a means of quality control or academic guide.

The fundamental goal of secondary education is to place emphasis on individual improvement. In precise terms, the concept is to increase vital competencies to a better lifestyle and to allow greater independence through ongoing studying; it should also deliver a boost to socialization and cultural integration and support for modern-day multicultural societies. Defining education as a fundamental right improves access to the process. This indicates having to address issues of getting proper access to, progress, and retention, which might be the fundamentals of the education system. The prevailing strategy is to provide a preferred and non-selective education option to get proper access and entry. For instance, it prevents grade repetition in the education system by providing students with better learning opportunities.

The increased attention given to education is fundamental. It considers the increased improvement of students' capacity to practice their privileges, partake in public discourse, and generally have a beneficial process. Quality education is still present in South America and the Caribbean and must be viewed as an optional objective comparable to higher inclusion. Improving pre-school, basic and optional training can help students from lower financial and social classes, allowing them to incorporate equitable learning as a fundamental method of balancing their educational systems. Locally, within nations, there are challenges to education and poor conditions for appropriate learning, combined with twenty-first century difficulties, such as narrowing the education gap and developing prospects for critical thinking among students, apart from practicing citizenship in progressively multicultural and globalized conditions.

UNESCO's South American Research Center for the Appraisal of Value in Education (SERCE) gives the best relative data on the academic advancement of grade school students. It includes 16 nations, 3rd and 6th grade students evaluated in language and arithmetic, and 6th grade students in sciences. The results suggest that an average of one out of every two are 3rd grade students had not accomplished level II education in science, while 1 out of 3 had not accomplished this level in education (Meade & Gershberg, 2008). Besides, there were marked contrasts among nations. For example, though 7% of 3rd grade students in Cuba didn't accomplish level II education, the figure was 49% in Panama and 78% in the Dominican Republic. Differences were even the more striking in science subjects.

According to UNESCO, the factors behind the difference in student involvement include the financial and social status of the student; school environment and student insight thereof, the teaching duration; and years in pre-school education.

The negative impacts of education include child labor and grade redundancy. The SERCE-2006 results additionally show that South American countries vary greatly as far as the quality of education in educational systems is concerned. This suggests that the nature of education conditions and cycles can have a great impact in minimizing imbalance. An especially striking case recognized by SERCE is Cuba, which has effectively diminished education disparities identifying with a financial status more than some other countries. Additionally, the inaccessible distinctions in Cuba's schools were not applicable in inconsistent factors among students in any subject or evaluation assessed by SERVICE.

In the context of education for all, a fundamental examination of the teacher's living conditions must be done, observing the accessibility of teachers and their level of preparation. As far as the number of students per educator is concerned, in 2010, the general condition in South America and the Caribbean was moderate. It was near the average level when contrasted against other regions, as far as education is concerned. Thus, improving education standards nationally for South American countries would be necessary.

Despite advancements in education, the proportions are not relatively high because of significant dropout rates; this reflects significant efforts to increase the number of teachers accessible at different levels of training. As far as the nature of educator preparation is concerned, data shows that, in 2011, 81% of primary educators and 71% of secondary school teachers had guaranteed education preparedness. Be that as it may, there are regional contrasts in the degree of professionalization, as in certain nations (especially in the Caribbean), just 50% of basic and tertiary educators are confirmed, while in other nations, the level is around 90%.

Between 2000 and 2011, South American countries generally made low progress regarding primary and secondary education. This does not imply that the preceding decade saw no changes; however, that those had been conflicting: a few nations extensively multiplied the number of licensed teachers (such as Panama), while the numbers fell substantially in others. Generally, efforts have been focused on increasing the levels of teachers available rather than on raising the requirements of teacher improvement.

Reports further indicate that the regional state of affairs does not bode properly in this regard. In line with the records, ongoing education is uncoordinated and does not consider the teachers' conditions or the demanding teaching situations. All of this results in low-effect actions in aspects relevant to the teaching career.

1.10. SCHOOL ENVIRONMENT AND THE RELATION TO EDUCATION QUALITY



Figure 1.12: Teachers must allow for open communication and socialization in the class environment.

Source: https://ecampusontario.pressbooks.pub/robsonsoced/chapter/_unknown_-6/.

There is empirical proof of the importance of the school environment to student achievement in South American countries. The school setting became one of the most dynamic variables behind primary school educational performance within the model mentioned above. Factors associated with the school environment include teachers' management of classroom activities and correct use of teaching time, which morphed into the maximum influential issue on learning (Matos, 2016).

Findings have been according to the literature on effective change strategies. The school environment indicator measured at the school level examined literacy, mathematics, and natural sciences. Results showed that there's some relation between school surroundings and student fulfillment

and performance. Additionally, it has been determined that South American countries (Mexico, Brazil, Colombia, Panama, Peru, Trinidad and Tobago, and Peru) had education policies that provided a high-quality impact on student's literacy achievements. The growing significance of the school surrounding has caused the updating of guidelines that encompass the school environment. Unfortunately, recent guidelines aimed toward improving the school environment generally focus on reducing violence or bullying. They use strategies based on punishment and manipulation.

1.11. CITIZENSHIP EDUCATION AND TRAINING BEST



Figure 1.13: Morning parade in a South American school.

Source: <https://www.globalcitizen.org/en/content/10-barriers-to-education-around-the-world-2/>.

Citizenship education is now common; it includes training that focuses on knowledge, talents, and attitudes to college students to engage in civically-minded behavior, determine their rights and participate in society. Research carried out together with the international association to evaluate educational achievement (IEA) determined how students from various international locations have been being organized to take on their function as citizens. In South America, particularly Mexico, Colombia, Guatemala, Paraguay, Dominican Republic, and Chile. One of the key conclusions

became the assessment of the education curriculum and the actual learning of scholars. As an example, even though the curricula in all six of the countries had the characteristic challenge to develop and support greater democratic, inclusive, and cooperative societies.

In particular, in 5 of the six participating South American nations, half of the students had the lowest level of understanding, which means they're no longer acquainted with the principles of participatory democracy as an instrument and do not have an expertise of civil concepts, structures or establishments. Socio-economic status is undoubtedly related to civic expertise and is an applicable factor in explaining differences in student conditions and locations. Researchers found a correlation between family and school heritage and the civic knowledge of pupils (Manacorda et al., 2010). However, factors around school structures may also give an explanation for such variations. In South America, low levels of civic knowledge could also be due to the low precedence given to these topics in faculty and issues related to citizenship education.

Chapter 2

Educational Indices in South America

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2.1. INTRODUCTION

It is with no doubt that there exists a difference between the countries within the LAC region in terms of their nature and structure of education system, the sophistication of their statistics, and their degree of development. These factors help in drawing the differences that exist between these countries. There are three differences. The first is that advanced countries are more sophisticated than the rest in terms of their statistics and their education systems. Such countries include Argentina, Brazil, Chile, and Mexico. On the other side of the coin are the countries considered more complex than the rest, such as Bolivia, Guyana, and some of the countries situated within the central parts of Central American countries (Balán, 2006). In between is what describes the majority of the countries in the region and are defined as the improving countries. Despite the significant improvements underway, these countries tend to have significant problems that are still underway. Some of the countries that are included in this category include Paraguay, Jamaica, and Uruguay. To improve their existence, the countries that tend to be more advanced than the rest tend to feed off information either from their own country or from other countries.



Figure 2.1: Countries in South America. These countries can be subdivided into three groups, the first one being the advanced ones; the second ones are the more difficult ones and thirdly the improving ones. Advanced countries tend to rely on information in order to get where they are.

Source: All Country List.

For the countries that exist in between, their need to be more advanced is for specific improvements in their areas of weaknesses. Like developed countries, these countries need to contact or have a flow of information regarding the best practices inside or outside the region vital in improving the best parts of their systems. To ensure that all the countries in the region benefit, they all need sufficient access to information regarding what would be best for all the parts of the region. This, in short, means that to be on top, all the countries in the region need to be able to work together. This is especially in terms of their education. Without a doubt, with education, a particular area is well within its capacity to emerge on top. Apart from education, other factors that need to be in accord with each other are education indicators and management information.

There is an essential need for them to carry out statistics to improve the education system. The education statistics, and particularly the methods of indicators, have several uses. The first use of the education indicators is regional and international studies, research, and inter-country comparison. The second use is for the national level programming, policy, and monitoring of reform efforts and all the other services for which the educational statistics have been traditionally used.



Figure 2.2: Individuals standing together to support regional and international studies in South America. This is the main reason why having statistics on education indicators is important. With this, there can be an intercountry comparison involving education, which can be a great motivation for the various schools in the region.

Source: E-International Relations.

When dealing with the statistics that affect a particular nation, the indicators need to be fine-grained. Furthermore, it needs to be detailed, unlike when dealing with international or regional statistics and indicators. Indicators for a particular nation need to monitor the status and progress of education for a specific region, especially when there is a substantial change and live sector reforms.

These indicators are typically designed to provide detailed guidance in terms of the policy that are being implemented, planning of the sector as well as feedback that is offered to specific subunits such as the individual schools, the school districts, the municipality as well as the entire provinces (Luque, 2017). They are helpful as they are used to monitor how the performance of individual subunits has been changing over time or compared to other entities.

The questions that are raised by the national policy are seen to call for in-depth information regarding the schools and are generally seen to go beyond the needs of the international comparisons. A sample-based study is required in such a situation, which may be hard to replicate in regions.

Consequently, when dealing with a particular nation, there is the dire need to trace the changes of the indicators, which is essential for several uses, which may then call for monitoring more frequently compared to when dealing with the international systems of education. It is pretty difficult for the global indicator system to aspire to the level of the national systems. The main aim of the international indicators is to compare the education systems between countries or a group of countries. There are typically issues regarding comparability and those largely absent in terms of definition when dealing with the national systems. These issues are generally regarded as being of great importance.

Topics such as relative efficiency, economic commitment and effort levels, and the balance between the public and private schools have been researched at the regional level. Still, there is instead a call for consideration at the international level. Individuals who use such indicators include the international aid organizations, among other bodies with a great interest in the same. When dealing with an individual country, the claim is in knowing how the education systems in their particular country are compared to those in other countries found within their specific region. Apart from this, they consider their level of development compared to the other countries within the region.



Figure 2.3: Children in a classroom with their educator, in order to fully understand their position in education at regional levels, a nation looks at their system of education and compares it with that of the other counters within the region in which they exist.

Source: Entrepreneur.

There is a need for a lot of the same data, given that the two uses of indicators tend to have the same uses. This will help give a sharp distinction between the national and the international levels of education. It is recommended that individuals understand the differences between the two uses of educational indicators

2.2. IMPROVEMENTS IN THE EDUCATION SYSTEM

It goes without doubt that there have been significant improvements in the education systems regarding the LAC countries' education. The upgrades have no doubt been occurring in several decades to achieve the desired education system for the region. Among the observable improvements include the speed at which the data is being collected, processed, and available to the public. In the current society, the most significant achievement is its capacity to add to the number of currently being considered variables. This helps in greater completeness of information, and it ensures the accuracy of the data. In other cases, there is the inclusion of the achievements observed within the education system and the educational quality that has been achieved in the region (Lustig et al., 2013). Such data has been helpful in terms of

policy reforms, implementation, and the essential questions that get to be asked during policy formulation. Ideally, most of the observed differences have been made possible through the use of computers, software, and the compilation of data, making it practical to understand which reforms are helpful to the education system fully. International organizations have ensured that the region has financially accessed the computing equipment to promote the entire process. Furthermore, they have provided training to the required personnel and gone to providing technical assistance



Figure 2.4: Individual providing technical assistance on how to use particular computer software. The international organizations have been able to assist the countries in the South American region by providing them with financial aid, training of personnel and also gone to the extent of providing technical assistance so as to ensure the success of the education systems in the region.

Source: Quamed.

Most of the countries in the region have received at least one form of international aid that has helped improve their education statistics system in the last decade. In other instances, the assistance would not be as effective as a number expected it. When one decides to explore the education system in the region, it is with no doubt that one would easily find the exciting new developments that have taken part in the education indicators, statistics, information systems, and the related areas of the sector. In acquiring information regarding the same, there seem to be cases that provide flavor to the changes. Several countries such as Brazil, Chile, Paraguay, and Ecuador are developing a national system that will help education statistics. On the

same line, Chile and the Argentine province of Mendoza are experimenting with the particular system in which they use the individual student records to overcome several issues. Some of the problems that may be solved using this specific system include measuring the repetition capacity of the students and the dissertation through the provision of information for research and policy analysis.

The Centro Latinoamericano de Demografía, commonly known as (CELADE), is a body of the UN Economic Commission for Latin America and the Caribbean. This body has been able to develop a sophisticated system used for the sole purpose of school mapping. Through this, each school will have the capacity to be easily identified through georeferencing technology and what is referred to as an extensive database; this system will help provide the data of an individual school when overlaid on the map on different scales. Paraguay is an excellent example of a country that has adapted this system and is considered to be fully functional at the moment. The process was made plausible through financial aid from IDB. In various small communities near Santiago in Chile, the process is emphasized to be used in decision-making.

2.3. DIFFERENCE IN STRUCTURE AND THE PROBLEMS OF COMPARABILITY

There exist several variations regarding the twelve-year education system of primary and secondary education in most countries in the region. This is given the fact that the system can be divided in various ways. In most Latin American countries, the structure is based on the six years of primary education, two or three years of basic or what is known as middle secondary, and the rest of the years spent on upper or higher secondary education. This is regarded as being the diversified form of the education system. In most of the countries in Latin America, the entering age is either six or seven years. For most countries in the Caribbean region, the formal education system is the seven four structure. In this particular region, the official entering age is five, but an exception exists for the Jamaican country. For a few private schools in the area, the 4–4–4 system is used (Knoepfel & Brewer, 2011). Different countries are known to provide other names for the different levels of education in the region.

Furthermore, they group them differently. The levels in the education system are primary, lower, and upper secondary. To develop a system that allows for comparison, it will be necessary for the countries of the region to

reach an agreement on the classification of levels, and the terminology used uniformly, as proposed in the revised version of the international standard for the classification of education by UNESCO's Division of Education Statistics in Paris. These new developments aim to improve the education situation and make it easier for comparability. With different education systems, it proves to be quite hard to compare the education systems in other countries. With the merging of the systems, it would be pretty easy to determine the level or rather the particular school's position regarding their education. The greatest that still faces the education system worldwide is regarding the level of education after secondary school.

Furthermore, the other levels of concern are the forms of vocational training, technical and professional education. However, for the countries in Latin America and the Caribbean, this particular problem is not an issue of concern for the region. Higher education in these regions has not become as advanced and is a cause for concern for the area, unlike their counterparts in the northern hemisphere.



Figure 2.5: Graduation from higher education. The system of higher education is not considered as a major problem in Latin America and the Caribbean, given the fact that it has not developed like in the regions in the northern hemisphere.

Source: Economist Intelligence Unit.

The categorizing of the preprimary education through to the upper secondary school that has been used has become common in that it may

prove to be quite challenging to change. This is given even though there are those critics that need a clear operational definition. There is no doubt that there need to be critics To put a particular sector on toes to ensure that better decisions are made to ensure that the best results are seen from a specific policy reform. There will be a need to combine the ISCED categories used by the LAC countries to get reliable information regarding the postsecondary level for pragmatic reasons

2.4. DIFFERENCES IN TERMINOLOGIES AND DEFINITIONS

There exist many differences regarding the terms and definitions used in describing the education systems. There also exist differences regarding the related functions that education plays. This is not only in terms of the significant levels of education but also considering the types of education and the phenomena surrounding it such as promotion, repetition, failure, wastage, class retention, the classrooms, the teachers, the establishments, educational units, and the technical education versus the diversified education system. In Spain, the terms that are normally used include, repetición, aprobación, reprobación, deserción, abandono, desgranamiento; clase, sección, paralelo; maestro, docente, profesor, profesor de aula, director(a); escuela, plantel; educación vocacional (or técnica) vs. “técnico-profesional” as used in Chile. Ideally, after the revision of the categories of the education system, regarding the definitions and the terminologies used, there still will be continued complications regarding the same. The difficulties that exist within the education system may prove quite tricky, even over some time. This is, however, expected given the fact that when it comes to dealing with important sectors such as that education, some are there to put their paws right in. This means that individuals who engage in policy formulation and implementation benefit themselves instead of looking at the individuals affected by the process (Keen & Haynes, 2012).

2.5. PROBLEMS REGARDING KEY VARIABLES AND INDICATORS

Enrollment and attendance is the most basic and essential variable. As important as it is, it has proven quite difficult to always have access to the best enrollment data, especially regarding those of the private schools.



Figure 2.6: Children enrollment to private schools. There has been an increase in the number of students that are enrolling in private schools, but the case is that it is quite difficult to obtain the data from the institutions, which is disadvantageous when conducting the statistics regarding education systems.

Source: Hearst Bay Area – SFGATE.

When collecting data from schools, different countries collect data differently. There are those countries that collect data twice a year, while there are those containing once a year. This shows some form of difficulty when dealing with how comparisons for the systems can be made. To ensure that the figures can compare truly, comparisons need to be done with a lot of care. When dealing with individual countries, reaching the enrolment of the children into schools is generally based on different periods. Complications may occur during comparisons due to the differences in climatic conditions, such as the cases of Nicaragua and Ecuador. In such a situation, there exists a lag in a period of six to nine months. Low attendance rate is also an important indicator, especially when in need to point out the quality and equality issues that need to be addressed. Furthermore, they usually are associated with dropouts and repetition.

Repetition is considered to be perhaps the most complex variable. In the LAC region, over 80% of the schools can report data on the repeat of the students. In most instances, repetition cases are based on the responses of the teachers and the school directors when they are answering the question regarding the number of students that are repeating. The main issue is that the provided answers do not usually regard the students who have transferred to other schools and enter the same grade they were in the following year (Hutt & Polikoff, 2020). In most cases, these students are generally counted as first-time students when, for a fact, they are repeating students just in

a different school. To deal with this particular problem, there have been scholars in Santiago led by Dr. Ernesto Schiefelbein; a new mechanism has been devised that has been able to help estimate the minimum number of students that are repeating a particular class. The methodology used is based on a model that uses age-grade matrices for two consecutive years. This can show the minimum amounts of repetition that must take place. The process makes it possible for the schools to identify the standard data provided on repetition reported by the national education statistics. In most cases, the data that is provided consistently underestimates repetition rates in vast amounts.

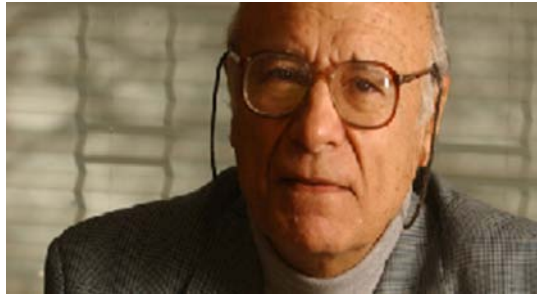


Figure 2.7: Dr Ernesto Schiefelbein. This doctor-led the development of a new mechanism designed to help in the estimation of the minimum number of students that are repeating a particular class. This follows the inefficient data that is normally provided in schools by the teachers and the school subordinates.

Source: Corporacion de Universidades Privadas.

Dropouts and wastages, just like repetition, is another variable that is poorly measured and critical in acquiring data regarding the education systems and making comparisons. A fifth of the LAC countries does not provide data regarding the number of students that have dropped out or the desertions that have taken place. A term is known as “*desgranamiento*” is usually used to define the total loss of students within one year. The same may occur due to several reasons such as dropouts, transfers, and in worst cases, death. Indicators of coverage or participation is also an important variable. The OECD has well within their capacity to publish their highly regarded education indicators in a book known as “Education at a glance.” In this book, participation is a term used to define the portion of relevant age groups enrolled in school in the primary, secondary, and tertiary levels. Different countries in the LAC regions tend to use different terminologies to

define the net number of students who have enrolled in either of the levels of education. Indicators of internal efficiency are another important variable in making comparisons. In measuring, the efficiency seen in the flow of the students in the entire system of education tends to be complicated given the fact that there exist problems of definition and an incorrect measurement of the repetition and dissertation levels. Different methods are used to measure the efficiency indicators in different countries, such as using the average years of schooling, the years required to complete a particular level, among others (Gvirtz, 2002). These indicators are not clearly defined, which measures efficiency, a considerable problem for the education system. In OECD, the schools do not calculate the efficiency of the student as the flow through the system or the rates of transitions that students go through by the end of a particular schooling year. In another case, they do not consider repetition as a significant issue. In Latin America and the Caribbean, the dropout rates are reasonably high, especially in the early primary grade, proving to be the crucial level of a child's education. Due to lack of data, clarifying the concept of efficiency will prove to be a significant challenging issue but can be helpful when making an international comparison



Figure 2.8: Children drop out of schools. A good number of children drop out of school in Latin America and the Caribbean. Due to insufficient data regarding the same, policy formulation and implementation regarding these students will be quite a challenging process.

Source: Boldsky.

Data on teachers is also an important indicator that can be useful in making comparisons regarding the school systems. This is concerning the professional status of the teachers, their qualifications, and their training. Other than that, there are several different characteristics, such as those

involving their characteristics and teaching the students. The problem that exists regarding the data on teachers is that several schools were not able to provide information on their teachers regarding their qualifications and their levels of training; the major problem that usually exists face the secondary schools who do not provide information on the teachers especially given the fact that the pay teachers based on the working hours. In other instances, it proves chaotic in categorizing the individuals that work within the school based on whether one is a teacher, a school administrator, or any other school staff.

Data on schools is important, especially when making comparisons. However, there are complications in providing definitions, especially when there is more than one school operating under one establishment. Either when the schools are working simultaneously or at different times (Hooker, 2005). An example is the case of the pre-school operating in the same establishment and at the same time as the primary school. Most countries usually are transparent in their definition regarding such a scenario, but the problem exists because it may differ when considering different countries.



Figure 2.9: Student in the vocational schools in South America. There are no clear definitions on the type of schools these are. Data of the same that are acquired from the ministries other than those from the education ministries tend to be misleading given the fact that they are obtained from the private sectors.

Source: Great Schools.

Data on vocational and technical education is also an important component. This is the level where efforts to revise it have encountered several problems. In the LAC, there are significant differences that exist

in defining the same. Some explain this level as vocational training. Others describe it as pre-employment classes in academics, diversified streams of education, and others define it as the separate techno-professional stream at the secondary level. This is how it is defined in Chile. The data provided on vocational training by other ministries other than the ministry of education tend to be lacking. Since they are primarily data on the same but obtained from the private sector, such data make it difficult for interpretations and comparisons

Data on educational quality and achievement is another important variable. In Latin America, there is no standard way of assessment or testing. This situation is currently changing in most parts of the world, and most of them are coming up with a way to institute achievement tests and forms of evaluating students. Through assessments and evaluations, the school may know the school's position among several schools apart from knowing the status of individual students. In some cases, assessment is based on testing the individual students at different levels, in which case the tests are administered to several students or several schools. Only a few schools in the LAC region have had the capacity to participate in international assessments. Only three countries were able to participate in the Third International Math and Science Study, of which one of the countries that participated made it clear that they did not want their data to be posted. Very few countries have established the systems for testing the students and further provide data regarding the educational quality of a particular school.

Two countries were sampled to fully understand the educational indices in the South American region, and education systems were discussed in detail. The two countries include Brazil, which is regarded as an advanced country, and Bolivia, which is considered a complex country.

2.6. EDUCATION INDICES IN BRAZIL

Brazil is the largest country in both the south and Latin America. In the world, it is both the fifth largest in terms of geographical area and population. In terms of education, they first began with Jesuit missions that controlled their education. The power of the Jesuit's missions was then reduced by Marquis de Pombal, i.e., 200 years after their arrival. After their power was reduced, the government took over the running of education. It has since then been run by the government through the ministry of education. Brazil uses both private (run by individuals) and public (run by the government). They both share the same curriculum provided for by the ministry in charge of

education. Since the 1980s, Brazil has progressed in terms of its education. There has been an increase in terms of enrollment; for example, children aged between 7 years and 14 years, their enrollment increased from 81% to 96%, and those aged between 15 years and 17 years in the same period increased from 49% to 83%, and the literacy rate in the country rose from 75% to 90%. This shows that Brazil has made tremendous strides in terms of its education.



Figure 2.10: A kindergarten class in progress. They majorly deal with cognitive, motor and literacy skills.

Source: EdSource.

In the Brazilian education system, there are several facts one needs to understand, and these are: Pre-school education (*Educação Infantil*) is entirely optional and is not a must for young children. It comprises a nursing school, which is for children up to 3 years, whereas kindergarten is for children between the age of 4 to 6. Primary and lower secondary school (*Ensino Fundamental*) follows and is for children between the ages of 6 to 14. In this level of education, it is compulsory for students to attend and is free as it is paid and/or funded by the national government. (In private school's parents have to pay). After attending primary and lower secondary, learners then move to upper secondary school (*Ensino Médio*), which is for children between the ages of 15 to 18. At this level, education is also free (for public students), but it is not for children to be enrolled or attend (Behrman et al., 2001).

When they complete their secondary education, they enroll in higher education (*Ensino Superior*) which is provided for by public and private universities. In this also it is free but for public university students. Their school calendar begins in February/March and runs to November/December. They then go for their summer vacation and from the middle of December

to early or late February. When they finish the upper secondary exam, they have to sit for an entrance exam, also known as vestibular, for the specific course they want to study in higher education.

Approximately 51 million students enrolled in basic/fundamental education, whereby almost 43 million are in public schools, and 8 million are enrolled in private schools. This shows that many parents enroll their students into public schools as it is affordable and is compulsory for students to attend. Brazil has almost 400,000 teachers who are responsible for imparting knowledge to students. The organizational and structure of education in Brazil education is divided into three categories and is as follows.

2.6.1. Pre-School Education (Educação Infantil)

This level of education is optional and is not necessary for young children to attend. It aims to help children in their all-round development, which may include but is not limited to motor skills, i.e., in the use of their bodies, e.g., use of hands for writing and use of different parts of their body when carrying out different activities, cognitive skills, these include brain function, e.g., talking, singing and connection of words to form sentences and lastly social skills, these include how they relate with their fellow children. This is major to prepare them for the next stage of their learning and knowledge acquisition (Howard, 2009). In these, they are divided into three categories based on their ages; there are day nurseries for children under 2-years-old, they are taught how to walk, speech, etc. In contrast, kindergartens are for 2 to 3 year old here; it is primarily social skills as their learning entails a lot of singing and games to improve their speech and how they relate to fellow children, then pre-schools mostly for children between 4 to 6 years, in this category or level they get cognitive skills such as counting, making of sentences, etc., as seen in pre-schools it is mostly preparation of the child's brain to prepare for the learning and knowledge they'll then acquire later.

2.6.2. Elementary School (Ensino Fundamental)

This level of education is necessary for all children and is for young ones between 6 to 14 years of age. The only needed prerequisite for a child to enroll in elementary school is to be 6-years-old, but they can enroll younger than 6 years so long as the child will turn 6 in their first year of elementary school. In their first, it is mostly similar to their pre-school. When a student is enrolling to join, there are some requirements which include; the name of

the child, birth date of the child, birth certificate, a photo of the child, the parent's names, the residential address of the family, the medical history of the child which include, vaccination records and their blood type.

The main aim is to ensure that the child can read, write and calculate. They are also taught to understand natural laws and how people relate to the general society. They are taught how to develop the ability to think and create. The primary curriculum includes; communication and expression in the Portuguese language, social studies (geography, history, and social studies) and political organization of communities, and Brazilian science and mathematics. At this level of education, students take all subjects with one teacher. They may have another teacher if they include a foreign language, such as English and Spanish. In the first school year, most first graders fail, and this results in 2.3% of them decided to drop out of school. Many people are living in rural areas.



Figure 2.11: A class in progress, students learn to read, write, and calculations in primary education.

Source: GlobalGiving.

The individuals living in the rural area are ensured to enroll their children in school. A public education policy for schools in these areas exists, and it prepares teachers to teach native and indigenous people. In these areas, children go to school for either half a day, i.e., mornings or afternoons. This ideology ensures that students are busy for up to 8 hours each day with instructions, sporting activities, medical assistance, food, and some cultural activities to ensure they stay in school and encourage others to enroll in school in 1984. This idea, although excellent, required many funds, teachers, and other staff; with these factors, the project slowly faded, and their pieces left were taken up by other projects (Graham, 2002).

At the end of every year, the children are given an exam to determine whether they will proceed to the next level. When they pass, they move, but they are held back and have to repeat the same class if a child fails.

2.6.3. Upper Secondary Education (Ensino Medio)

This level of education is for young students between the ages of 15 to 18 years of age. They continue studying the same subjects as in elementary school. They add a few more which are philosophy and sociology. The curriculum in this category enables the learner to get a prerequisite to join a public university. This is mainly carried out for four years. When they do their promotion exams for the next year of their secondary education, they are graded using the same scale as those attending primary school. This level is free but is not compulsory; hence, few enrolments drop out after their elementary education in lower secondary. This level of education is provided for by all levels of government

2.6.4. Technical Education (Ensino Tecnico)

For students to join technical education, they will have to have gone through upper-level education. This simply means they do not drop out of lower secondary.

2.6.5. Higher Education (Ensino Superior)



Figure 2.12: Higher education in Brazil. Students sit for an entrance exam to get to this level.

Source: QS Quacquarelli symbols.

Before they are enrolled in the technical institutions, they will have to undertake an entrance exam for the specific course they will want to undertake. As compared to upper secondary, the hours in technical institutions tend to be more. The course lasts for between one and a half to two years. Another level is to join a public or private university after successful completion of their secondary education. After completion, they have to sit for an entrance exam, the vestibular. In private universities, these exams are mostly for formality, and hence this has led to public university degrees being preferred to more than private degrees. Like most nations, Brazil is divided into two, i.e., undergraduate and graduate work. In Brazil, the bachelor's degree is awarded for courses in social sciences, humanities, arts, etc., and it lasts for two to three years, whereas for special courses such as law, medicine, engineering, human medicine, veterinary medicine, and architecture lasts for five to six years. After successful graduates, they can then take postgraduate courses, which are *Lato Sensu* or *Stricto Sensu*. *Lato Sensu* are graduate degrees that refinements and specialization but do not confer any titles after completion, and they are done for one to two years (Gershberg et al., 2012).

On the other hand, *Stricto Sensu* confer an academic title. A student has to do a master's degree for two years, and at the end of this period, they have to provide a master's thesis. Upon approval by the examination board, they will receive their master's degree. They have then conferred the title master. After completing a master's, they can pursue a doctorate, as one cannot do before mastering. A doctorate is done for four years. After four years, the students have to present a doctoral thesis, and if it is approved, they are then given the title doctor, which is the highest educational achievement.

2.7. HOME SCHOOLING

In some instances, some parents end up preferring to educate their children at home. The parents might feel like the student does not get the required education due to their area, which might have insufficient requirements for the child's needs to be met educationally. As the law dictates that, every child needs to behave in compulsory education at six. The parents, after careful consideration, may decide to educate their child based on the factors they are facing. They will have to go through a lengthy process, including the ministry of education and justice.



Figure 2.13: Homeschooling, a parent teaching their child at home. It is rare but present in Brazil.

Source: The conversation.

2.7.1. Teacher Training

For an individual to qualify to teach, they'll have to undertake a graduation course and also an internship program that is supervised, and they'll also need at least 300 hours of teaching practice. To teach primary school, one can be certified through the secondary school program, but to teach a secondary school, one has to obtain either a master's or a doctorate

2.7.2. Adult Education

This is education for individuals above the required age to enroll in the normal level of education. The minimum age for those enrolling into elementary is 18 years of age and 21 years for anyone who wants to join secondary level. Supervision of adult education is carried out by state boards and inspection services. Those who complete their education are awarded a diploma.

In Brazil, they have a schedule for attending school due to overcrowding in schools. This has led to students not attending school for the entire day; hence there are three sessions each day, i.e., The first session from 7:00 AM to 12:00 PM, the second session from 12:00 PM to 05:00 PM, and lastly, the third session from 05:00 PM to 10:00 PM. Students only attend one session per day. Some schools offer two sessions, but most of them offer

three. Students are generally in school for most of the year except July, a holiday month mandated by the government. They also have the summer holiday, as discussed earlier (Gasperini, 2000).

The cost of education in Brazil is generally cheap for those attending public schools. Still, most parents prefer their children attend private schools because they offer a better education than public schools, and they are costly. Some parents who are far better off in monetary terms enroll their children into international schools to learn the foreign curriculum. They can enroll in universities from those countries, e.g., in America and Britain.

According to the United Nation's Education Development Index, the Brazilian education system faces many challenges. It is ranked number 79, well below other Latin American countries such as Mexico, Venezuela, Costa Rica, Chile, and even Argentina. In most cases, the government does not set its priorities straight. Hence, funds are mismanaged or embezzled and used in the wrong place. The government needs to invest in pre-school coverage and ensure they help increase the number of children attending school by improving the quality and environment in the school.

Another major problem is that few children go to primary school even though it is compulsory for them to attend. Even for those who participate in primary school, statistics show that most students have repeated a grade. This then leads to dropout cases of students. Those who remain in school perform poorly because of the poor quality of education being offered.

The relevance of content in schools is the problem as most students are being taught essential things but not knowing that would help them in their future endeavors. There is also inequality as Brazil is one of the countries with significant income inequality in the world. To some extent, this can be linked to race as Brazil is a multi-racial society, and almost half of the population is referred to as non-white and brings to fore the relationship between ethnic origins, income, and educational opportunities. According to statistics, white enrolled and stayed in schools compared to non-white, who a few enrolled and some dropped out of school along the way. Non-white are found to live in more impoverished conditions, and most of the parents are illiterate and do not find education that important.

Many Brazilians also do believe in education, as some believe education is not essential. They had a very successful president who did not finish his education.

Another problem is the lack of infrastructure, as the students have to be divided into three different sessions to accommodate all students. This

makes the learners get less time in class. Corruption is a significant factor. Teachers are poorly remunerated, and hence they do not attend classes on some days because they are not motivated and are not promoted.

These problems can easily be controlled, i.e., by expanding primary school coverage in the country and by increases coverage this will lead to an increase in enrollment, and when they finish their studies, there would be a significant impact on the economy and society in general (Gamboa, & Waltenberg, 2012).

Some of the ways that can be used to improve education in Brazil include; keeping the population below the age of 18 fed, e.g., by introducing feeding programs in schools. Increase parent's time with their children, children end up watching and playing mainly as parents are absent busy at work hence they do not spend time together as a family. Better teacher enumeration would lead to many individuals pursuing a career in teaching, improving the quality of education

2.8. EDUCATIONAL INDICES IN BOLIVIA

Bolivia has an 8–2–2 formal education structure that has appeared to be flawed in many ways. As in many other sectors in Bolivia, the educational sector is lagging, with every one out of seven children not completing primary school education while a majority never enroll in secondary schools. According to past statistics, approximately one million people over the age of 15 are illiterate in Bolivia. The continued poor education among the citizens of this country has contributed to the overall persistent poverty in their faces. Schooling time in the country is split into two shifts that are morning and afternoon. Thus, little time is spent on academics in a student's life to make it educationally pleasurable. The state schools are underfunded, and most of them lack essential teaching equipment and have poor teaching structures. Approximately 20% do not receive benefits from primary school education even though free and theoretically compulsory.



Figure 2.14: Education in Bolivia, lack of essentials teaching materials at the classrooms level, lack of enough employed trained teachers by the governments as well as good learning classrooms structures for enhancement of learning.

Source: The Borgan Project.

The educational sector has been divided between the rural and urban areas. Past studies have indicated that the rural illiteracy levels remain high even as the rest of the areas become increasingly literate in the country. Generally, the four years of learning secondary education are non-compulsory, and less than a quarter of young adults attend who are mainly based in urban settings. They primarily access education through private schools. Some of these are based on the American model, while others are religiously affiliated and espouse traditional values. Hence, education is skewed to the advantage of the already haves and often passes over the heads of those who might have benefited the most.

Additionally, Vocational training and many tertiary institutions in Bolivia are primarily uncoordinated and left in the hands of private colleges in urban areas. Several ongoing international aid agency initiatives aid access to education, especially the rural population. However, to the rural poor children, a chance to prove their value usually remains a dream because there is simply nowhere to join up. There are at least 10 state-funded and about 23 private universities. The University of San Andrés, located in La Paz, is the largest in learner numbers. The University of San Francisco Xavier in Sucre is the oldest, founded in the year 1624 (Fernández-Arias & Montiel, 2001). The main factors contributing to challenges in the education system in Bolivia include the language change in schools settings. Classes are mainly taught in Spanish, but some children learned to speak Quechua and

Aymara at home. Many children, especially those from rural areas, cannot understand what is being taught. Being taught a second language in school is also not typical. It is easy to see why kids would become discouraged and decide to drop out after failing to grasp what they are being taught because they cannot understand or relate to the language. Secondly, schools can be very run-down with little to no proper classroom materials with widespread poverty and not prioritizing education. While there is a lack of resources in Bolivia in general, schools are ranked at the bottom when addressing the country's needs. This has contributed to the lack of essentials teaching materials at the classrooms level, lack of enough employed trained teachers by the governments, and suitable learning classrooms structures to enhance learning. The poverty in Bolivia also affects the teachers, whereby they often go on strike to protest for higher wages and other related issues. This leaves children without teachers for sometimes days or even weeks at a time. According to most studies, the primary reason for a child not being in school and the shrinking literacy rate in Bolivia is, in fact, poverty. Statistically, children in urban areas can go to school on average for about 9.4 years, while those in rural locations only make it for about 4.2 years. The majority of the children have to work to make ends meet .they help in supporting their impoverished families and forego going to school.

Verner, analysis reveals that education is the most imperative factor for poverty reduction in society and community. All levels of education, such as primary, secondary and tertiary, are significant and negatively associated with the probability of being poor in the later life of an adult. He states that the advanced the education level, the lower the likelihood of being below the poverty line. With secondary education completed, the possibility of being poor is four times lower relative to completed primary education. This is depicted from the survey of the study done in Brazil (Friedrich, 2014). The probability of being poor having completed tertiary education, according to his calculations, is six times lower relative to finished primary schooling. Many countries have designed programs to combat poverty, improve human capital, build schools close to the poorest sectors, provide economic incentives for teachers, or grant cash transfers to families who send their children to school. However, Bolivia as a country is yet to attain its potential through education.

The chronic political instability has been reported to have hindered the development of the general education sector throughout Bolivia's history. In the colonial era, education was limited to a few clergies acting as tutors for the sons of elite families. Little effort was made to teach the Indians

beyond the bare necessity to convert them. Independence brought a series of ambitious decrees calling for universal, compulsory primary education and a public school system; nonetheless, little was accomplished. By 1900, schools existed primarily to serve urban elites. No vocational or agricultural institutes lived in the country by then. Only about 17% of the adult population was learned. A teaching mission from Belgium arrived in the early 1900s and, over thirty years established a foundation for rural primary education. In 1931, Lizard Perez founded a large nuclear school, a central school with five to eight grades near Lake Titicaca. Smaller satellite schools in nearby settlements supplemented the nuclear school's offerings. This arrangement became the prototype for rural education in the Andes. Overall, however, slight natural expansion of educational opportunities occurred. A 1947 law calling for an end to illiteracy drew attention to the government's limited capacity for action in this area. It required that every literate Bolivian teach at least one other to read and write and levied fines for adult illiteracy. On the eve of the 1952 Revolution, less than one-third of the adult population was literate in Bolivia.

Public education system legislation in 1956 laid the foundation in force in the late 1980s. History is reported that the government established a six-year primary cycle followed by four years of intermediate schooling and two years of secondary school ending with the baccalaureate degree. Laws in 1969 and 1973 revised the curricula. They instituted a five-year primary cycle, theoretically compulsory between the ages of seven and fourteen, followed by three years of intermediate school and four years of secondary education. The first two years of secondary instruction consisted of an integrated program that all students followed; the second two-year cycle permitted students to specialize in the humanities or several technical fields. All courses led to the baccalaureate degree, which was a prerequisite for entering the university. This was, however, only possible for children who came from noble, wealthy backgrounds.

Institutions of higher education consisted of the University of Bolivia and a variety of public and private institutes. The University of Bolivia, a consortium of eight public universities and one private university, was the only postsecondary school awarded degrees. At least four other private institutions were operating without legal authorization in 1989. Other schools offered technical training in the fine arts, commercial arts, technical fields, and teacher training. The University of Bolivia, which enrolled more than 100,000 students in 1989, was embroiled in a bitter conflict with the Paz Estenssoro government over what academic leaders feared were

government plans to make drastic cuts in publicly financed higher education. The government acknowledged its plans to promote private institutions to reverse a general decline in academic standards resulting from wide-open admission policies. The impasse over university finances led to student protests in 1988, with police intervening in the country's largest university, known as the San Andres University



Figure 2.15: Bolivian Municipality improves education. The program had little impact, however; improvements in the adult literacy rate.

Source: worldbank.org.

The ministry of education and culture in Bolivia organized adult literacy classes. By the mid-1980s, approximately 350 centers and more than 2,000 teachers were dedicated to children's literacy programs. More than half were in the department of La Paz, where more than one-third of the population. The program had little impact, however; improvements in the adult literacy rate. In the mid-1980s, about 93% primarily resulted from increased primary school enrollment. From 1973 to 1987, the percentage of school-aged children enrolled in primary schools climbed from 76 to 87%. Most educational expenditures went for operating budgets, especially personnel costs, leaving minor capital programs and expansion. Spending remained skewed in favor of the urban areas (Creighton & Park, 2010). Approximately 60% of Bolivia's 59,000 teachers were employed in urban schools. The economic crisis that beset the country in the early to mid-1980s had a severe impact on educational spending. Analysts estimated that actual education expenditures in 1985 were less than 40% of the total recorded in 1980. Over the same period, the percentage of the gross domestic product devoted to education dropped from about 3% to less than at least 2%; thus,

the education sector in the country lagged. Although the education system recorded some progress in enrollments in the 1970s and 1980s, significant challenges remained as of the late 1980s. The number of secondary school students grew twice as fast as the population of that age group. The university student population grew more than four times faster than the total population of about 18 to 24 years old. Still, secondary education remained beyond the grasp of most Bolivians; only about 35% of the eligible age group attended secondary school. Significant disparities also existed between male and female enrollment rates. Efforts to increase female attendance ran up against the harsh economic realities of more impoverished families who relied on their daughters' help with chores and childcare. Critics blamed the absence of intercultural bilingual education for the high dropout rates among rural schoolchildren.

Some changes to education in the country have been made, however, with the help of nonprofits. Many organizations have helped provide classrooms and classroom materials in decent condition. One organization, the Foundation for Sustainable Development, helps provide training, tutoring, childcare, and workshops to assist Bolivians with their educational needs. When given support and better learning conditions, children typically stay in school and even begin to learn at higher levels than their peers who are not given that support. If their educational needs are met, they are more likely to succeed. Significant changes have been encountered. Bolivia's HDI value for 2019 is about 0.7, which puts the country in the high human development category, positioning it at about 107 out of 189 countries and territories. The rank is shared with Indonesia and the Philippines. Between 1990 and 2019, Bolivia's HDI value increased from about 0.6 to 0.7, increasing 30.3%. Between 1990 and 2019, Bolivia's mean years of schooling increased by about 2.6 years, and expected years of education increased by 2.9 years. However, when the value is discounted for inequality, the HDI falls to 0.546, a loss of 24.0% due to an imbalance in the distribution of the HDI dimension indices.

Those educational disadvantages in Bolivia might accumulate at the intersection of gender and indigenous identity. The size of these cumulative disadvantages may vary within the indigenous population, which could be applicable for policy. Educational gaps affect current well-being and human capital and carry over to other outcomes and future generations. Labor market outcomes in Bolivia, for example, show significant variance by gender and between indigenous and non-indigenous groups, with the difference being driven by educational gaps across these categories. As such, differences in

education within indigenous groups may translate into further heterogeneity in labor market outcomes. In addition, education is correlated with health outcomes, the likelihood of living in poverty, and economic growth as well as being transferred across generations, as the children of disadvantaged parents tend to have worse education outcomes, are more likely to perform child labor, and are more likely to become unemployed later in life. Thus, identifying systematic gaps within indigenous groups may reveal educational disadvantages faced by men and women in each group and help understand other disparities and inter-generational patterns that go well beyond those outcomes.

Gaps in school completion are still significant, even among the younger cohorts of indigenous groups. Quechuas have the lowest average educational attainment in the country, but this is accompanied by relatively small differences between Quechua men and Quechua women. Aymaras, on the other hand, have a much higher average attainment level, in fact, the second-highest in all of Bolivia, after non-indigenous groups, but this is accompanied by the most significant gender gap observed within any group in the country, making Aymara women particularly disadvantaged relative to Aymara men from most studies. Overall, these findings suggest that the most significant penalty to Quechua women's educational achievement stems from their indigenous identity. In contrast, the penalty faced by Aymara women stems from being both indigenous and female (Cox, 2013). Overall, the education landscape in Bolivia has had a turbulent past, and perhaps because of this, literature measuring outcome disparities within and across subgroups of the population is thin. Even though rural and indigenous education has been at the center of education debates for nearly a century, studies show significant differences across indigenous groups. As will be shown below, within them. The underlying drivers of these differences, however, are not as well understood. While many empirical studies discuss education outcomes descriptively at a disaggregated level such as by rural-urban, gender, and wealth, there is limited literature on intersectional approaches to analyze cumulative disadvantages in education brought about by gender, group membership, and the intersection of both, in a multivariate setting. Further studies are yet to focus on the same.



Figure 2.16: In Bolivia, being female and indigenous.

Source: World Bank Blog-World Bank Group.

Despite efforts to universalize education in the country, however, the census data indicate that improvements were not uniform across gender and ethnicity. Several gaps remain, particularly in secondary school completion and years of education in Bolivia. Literacy rates have improved dramatically for all cohorts, including female Aymaras and Quechuas, so that while only one-fourth of women 70 years of age or older in those groups are literate, virtually all girls of 12 to 19 years of age, both indigenous and non-indigenous, are literate. As such, the gap between groups in this dimension has closed. Similar progress has been made for primary school completion. Only one-fifth of Aymara and Quechua women aged between 60 to 69 have completed primary school. Still, as many as nine-tenths of Aymara girls and four-fifths of Quechua girls aged 14 to 19 completed primary school, these gaps are even smaller among younger cohorts.

In contrast, the rate of secondary school completion has unequivocally increased across age cohorts. Still, the gap between non-indigenous men on the one hand, and Quechua people on the other, remains significant. Among those aged about 70 or older, 35% of non-indigenous men and only 3% of Quechua women completed secondary school; the respective rates for those aged 20–29 are 71% and 44%, respectively, resulting in a gap of similar magnitude for both age cohorts. A parallel pattern occurs for years of education. Although the average has increased for non-indigenous and indigenous groups, Quechua women in their 30s still have 4.9 fewer years of education than non-indigenous men. For those over 70 years of age, the deficit is 6.4 years. The conclusion can be termed that men are more literate in Bolivia as compared to women. Thus, there exists a gender

gap in accessing education in the country. Finally, considering gender-based differences within each indigenous group, the progress of Aymara men stands out from all other groups. Though the secondary completion rate of Aymara men is close to those of other indigenous groups and much lower than their non-indigenous counterparts, it is clear that in the latter half of the 20th century, Aymara men experienced a faster rate of gains in secondary school completion than other groups. For cohorts in their 20s and 30s, Aymara men's secondary school completion rate stands closer to non-indigenous men and women than those of any indigenous group. This trend is followed by a more recent one by Aymara women (Cole & Murphy, 2009). While Aymara women in their 50s and older have the worst secondary school completion of all groups, those in their 20s have a higher completion rate than Quechuas and other indigenous people but still significantly lower than Aymara men as well as non-indigenous men and women. Together, these patterns suggest that while the actual globalization of education may close gaps in achievement across gender and ethnicity, as shown by the progression of the literacy rate for each cohort, any incomplete shortfall coverage is likely to be borne primarily by indigenous people. Thus, soon, if no severe changes and or reforms will be taken, Bolivia will likely lag in the educational and other country sectors.

Chapter 3

Literacy Rate in South America

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3.1. INTRODUCTION

Education is generally regarded as a vital opportunity for people and cultures alike. Indeed, in most nations, basic education is now seen not only as a right but also as a responsibility: states are usually obliged to guarantee access to basic education, and people are often required by statute to obtain education up to a certain standard.

Literacy is commonly considered the ability to read and write in at least one form of written communication, as described by conventional dictionaries. In this view, analphabetism is regarded as incapable of reading and writing (Chang, 2019).

According to some historians, the term “literacy” can be separated into two periods: before 1950, when literacy was solely known as alphabetical literacy (word and letter appreciation), and after 1950, when literacy gradually started to be recognized as a broader definition and method, i.e., functional literacy.

Adult functional illiteracy is described in a variety of ways, including (a) the inability to use reading, writing, and calculation skills towards their own and community’s growth, (b) the inability to read well enough to manage daily activities and work duties that include reading skills above a basic level, and (c) the inability to comprehend complex texts despite sufficient reading comprehension skills.

International organization	Defining literacy	Note
European Literacy Policy Network: European Declaration of the Right to Literacy	Literacy refers to the ability to read and write at a level whereby individuals can effectively understand and use written communication in all media (print or electronic), including digital literacy.	A multi-layered definition of literacy, from baseline literacy to functional and multiple literacy.
OECD: Survey of Adult Skills (PIAAC)	Literacy is understanding, evaluating, using and engaging with written text to participate in the society, to achieve one's goals and to develop one's knowledge and potential.	It measures adults' proficiency in key information-processing skills - literacy, numeracy and problem solving in technology-rich environments
World Bank: Skills Towards Employability and Productivity (STEP)	Cognitive skills are defined as the “ability to understand complex ideas, to adapt effectively to the environment, to learn from experience, to engage in various forms of reasoning, to overcome obstacles by taking thought”	1. It assess the skills (cognitive, technical, and non-cognitive) of adults in urban areas. 2. The scales of the test are the same as those used in the PIAAC.

Figure 3.1: Defining literacy: Other international organizations or assessment programs.

Source: http://gaml.uis.unesco.org/wp-content/uploads/sites/2/2018/12/4.6.1_07_4.6-defining-literacy.pdf.

It differs from primary illiteracy (the failure to read and write a concise, clear sentence of one's own daily life) and learning disabilities (e.g., dyslexia).

This broadening of the conventional definition of literacy occurred when scholars in composition studies, curriculum science, and anthropological linguistics came to the conclusion that speaking of reading or writing outside of a given context is “simply incoherent,” as James Paul Gee puts it. In the earliest stages of mastering, symbol shapes take place in specific social environments. After acquiring the paper, any instance of reading and writing will still be performed for a particular purpose and event and with specific readers and authors in mind.

Since the 1990s, NGOs, research institutes, and advocacy groups have used a wide range of literacy principles to demonstrate that the shift from “discrete skill” to “social knowledge” has been ongoing and unequal. The traditional definition of “capacity to read and write” is often very similar to each meaning.

Literacy is described as the ability to recognize, comprehend, translate, construct, interact, and compute using printed and written materials in various contexts. Literacy is a lifelong process of learning that enables people to accomplish their goals, expand their skills and potential, and fully engage in their communities and broader society (UNESCO, 2004, 2017).

The United Nations Educational, Scientific, and Cultural Organization (UNESCO, French: *Organization des Nations Unies pour l'éducation, la recherche, et la culture*) is a United Nations (UN) specialized body tasked with supporting world peace and security through global collaboration in education, science, and culture. It consists of 193 member nations, 11 associate members, and nongovernmental, intergovernmental, and private sector affiliates. UNESCO is headquartered in Paris, France, and has 53 regional field offices and 199 national commissions to help it carry out its global agenda. UNESCO, along with the OECD, arguably has the most data and research on education globally. So for this chapter, we shall be looking at literacy through its definition. These patterns have been far from consistent across the globe (Cortina, 2013).

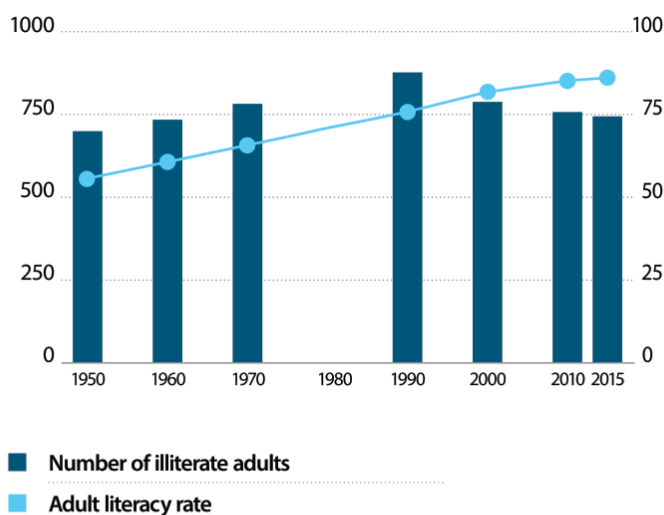
According to UNESCO literacy statistics, the global adult literacy rate has risen by 5% points per decade since 1950, from 55.7% in 1950 to 86.2% in 2015. Even so, population growth was so exponential for four decades that the proportion of illiterate adults continued to rise, from 700 million in 1950 to 878 million in 1990. Following centuries of compulsory education

programs, literacy campaigns, and the proliferation of print content and information and communications technologies, the figure dropped significantly to 745 million in 2015. However, it remains higher than in 1950.

In certain parts of the world, high youth literacy rates indicate that illiteracy will decline as newer generations with higher educational achievement levels overtake older generations. Lower school attendance, on the other hand, means that illiteracy would continue to a larger extent in Sub-Saharan Africa and South Asia, where the overwhelming percentage of the world's illiterate youth lives. According to UIS statistics from 2013, the youth literacy rate in South Asia and North Africa is 84.03%, while in Sub-Saharan Africa, it is 70.06%.

The adult literacy rate has progressed at a constant pace since 1950

Number of illiterate adults (million, left axis) and adult literacy rate (per cent, right axis), world, 1950–2015



Sources: UNESCO (1972); UIS database.

Figure 3.2: Adult literacy rates have increased at a constant pace since 1950.

Source: https://en.wikipedia.org/wiki/Literacy#/media/File:Figure_1_Adult_literacy_rates_have_increased_Reading_the_past_writing_the_futureUPDATED.svg.

In the last 25 years, however, literacy has spread exponentially in many countries. The United Nations' global plan to achieve Sustainable Development Goal 4 is now gaining traction.

3.2. FACTORS AFFECTING MODERN LITERACY IN SOUTH AMERICA

3.2.1. Gender Issues

According to UIS data compiled by the UNESCO Institute for Statistics in 2015, women account for about two-thirds (63%) of the world's illiterate adults. This imbalance was much more pronounced in previous decades: between 1970 and 2000, the global gender divides in literacy narrowed by nearly half. However, in recent years, although the gap has decreased, this development has slowed, with the gender differences staying almost unchanged over the past two decades.

Sub-Saharan Africa, which has the lowest literacy rates, also has the largest gender divide: only 52% of adult females are literate, compared to 68% of adult males. North Africa (86% adult male literacy, 70% adult female literacy) and South Asia (86% adult male literacy, 70% adult female literacy) all have similar gender disparities (77% adult male literacy, 58% adult female literacy).

The 1990 World Conference on Education for All, hosted in Jomtien, Thailand, will highlight the gender disparity in literacy and encourage more developed nations to promote women's literacy. Female illiteracy often overlaps with other forms of gender inequality. Illiterate women, according to Martha Nussbaum, are more likely to be stuck in an abusive marriage because their work prospects are limited and their intra-household negotiation status is worsened. Furthermore, Nussbaum connects literacy to women's ability to engage and interact efficiently with one another to "participate in a broader campaign for political reform" (Bonai, 2007).

Women and girls are unable to improve their reading skills due to social obstacles. Making literacy courses accessible can be inefficient if it interferes with women's and girls' valuable limited time. In certain situations, school-aged girls are expected to do more housework and look after younger brothers and sisters than their male equivalents. Generational differences may also contribute to these disparities: illiterate parents can underestimate the importance of literacy for their daughters, especially in

conservative, rural communities where girls are expected to stay at home. According to a study of scholarly articles conducted by the World Bank and the International Center for Research on Women in 2015, child marriage, which primarily affects children, leads to lower literacy levels. According to a 2008 study conducted in Bangladesh, any year that a girl waits to marry increases her chances of being literate by 5.6%. Similarly, a 2014 study in Sub-Saharan Africa showed that marrying young reduces a girl's chances of being literate while controlling for other factors.

According to a 2015 study of the child marriage literature, marriage delays should be seen as part of a campaign to improve educational attainment, especially female literacy.

Although women and girls make up the bulk of the world's illiterate population, there is a literacy gender gap in many developing countries. Evidence from the Program for International Student Assessment (PISA) has repeatedly shown that boys in member countries of the Organization for Economic Cooperation and Development are underachieving in literacy (OECD).

3.2.2. Social Issues

Many policy experts consider literacy rates to be an important indicator of a region's human capital importance. Literate people, for instance, can be educated more quickly than illiterate people and, on average, have a higher socioeconomic status; as a result, they have greater health and job opportunities. Literacy has been a central facilitator and growth target for the international community (Brandhorst, 2011). The UNESCO Institute for Lifelong Learning has announced the "essential role of literacy in reacting to sustainable development issues such as wellbeing, social inclusion, economic empowerment, and environmental sustainability" about the UN's Sustainable Development Goals, which were adopted in 2015. The majority of inmates are discovered to be illiterate: "The library has been the pillar of the prison's reading policy," according to Edinburgh prison, which won the 2010 Libraries Change Lives Award, and thereby recidivism and reoffending can be avoided, and imprisoned people can strive toward achieving higher socioeconomic status once freed.

3.2.3. Economic Issues

Literacy will help you get a better career and gain access to higher education. Adult literacy instruction was the subject of a cost-benefit report

commissioned by Ireland's National Adult Literacy Agency (NALA) in 2009. People, businesses they worked with, and the Exchequer, as well as the government and the country overall, benefited financially as a result of this—for example, improved GDP.

The relationship between the literacy at the beginning of the 19th century and effective modernization and economic breaking-outs at the end of the 20th century was pretty important as “literate people could be defined by an increased degree of innovation which offers opportunities for modernization, development and economic growth.”

3.2.4. Health Issues

Print illiteracy is also associated with a lack of understanding about current sanitation and dietary habits, which can worsen various health problems. Literacy rates, particularly in developing countries, impact child mortality; in these settings, children of literate mothers are 50% more likely to live past five than children of illiterate mothers. As a result, public health studies have become particularly concerned with reading skills to help women better access health care services, thus facilitating gains in child health.

For example, in Oyo State, Nigeria, a qualitative study survey project from 2014 found a link between literacy levels and women's socioeconomic status. According to the report, improving literacy in this region would lead to “economic empowerment and inspire rural women to exercise hygiene, resulting in lower birth and death rates.”

3.3. LITERACY AS A HUMAN RIGHT

Fortunately, such literacy skills are now required from any person in society, unlike Medieval times, where reading and writing are limited to those elites and the clergy. Literacy is an intrinsic human right to lifelong learning and social transformation. As backed by the International Commission on Education for the 21st Century report of 1996 and the Hamburg Declaration of 1997: “The fundamental human right is the literacy that has been generally understood as the basic knowledge and skills required by everyone in a rapidly developing environment.

There are millions, mostly women, who lack learning resources or who are not able to claim this right. The difficulty is to make that possible. It also involves building knowledge and empowering preconditions to understand. Literacy is also a catalyst for social, educational, political, and economic

engagement and lifelong learning. A paper entitled European Declaration on the Rights to Literacy was issued by the European Literary Policy Network (an organization of European literacy professionals) in 2016 (Warren, 2010).

“Everyone in Europe is entitled to learn knowledge. The EU Member States should ensure that the tools and opportunities needed for the development of adequate and sustained literacy skills to efficiently understand and use written communication, whether in print or digital media, are available to people of all ages irrespective of age, religion, nationality, origin or sex.”

3.4. MEASUREMENTS OF LITERACY

Table 3.1: PIAAC Proficiency Levels for Literacy

Achievement level and score range	Characteristics of literacy tasks
Below Level 1 0–175	At this stage, the respondent must read short texts on common subjects to find a single piece of contextual material. In most cases, there is no competing information in the document, and the submitted information is formatted identically to the information in the query or directive. It’s possible that the respondent may be asked to find information in brief, continuous messages. In this case, however, the details can be seen as though the text were not in a continuous format. The reader does not need to grasp the grammar of sentences or paragraphs, nor do they need to know how to use other text functions. Level 1 tasks do not allow the use of any dig-specific functionality. Tasks below Level 1 do not make use of any features specific to digital texts..
Level 1 176–225	The majority of tasks at this stage enable the respondent to read comparatively short digital or print continuous, non-continuous, or mixed texts to find a single piece of information similar to or compatible with the information provided in the query or guideline. Some activities, such as those requiring non-continuous messages, require the participant to fill out a form with personal details. There is very little, if any, competing knowledge available. Some tasks can necessitate a simple cycle across multiple pieces of data. It is anticipated that you will recognize common words, determine the context of sentences, and read paragraphs of text.

Level 2 226–275	The medium of texts at this stage can be visual or handwritten, and the texts can be continuous, non-continuous, or mixed forms. Respondents must create matches between the text and the facts in this stage of the task, which could involve paraphrasing or low-level judgments. There may be any contrasting pieces of knowledge present. Some tasks enable the respondent to loop through or merge two or more data depending on criteria, compare and contrast or justify the information requested in the question, or maneuver within digital texts to view and classify information from different sections of a text.
Level 3 276–325	Texts at this stage are also thick or long, with multiple pages of text that are continuous, non-continuous, mixed, or multiple. Understanding text and conceptual constructs becomes increasingly important in completing tasks, especially when managing complex digital texts. The respondent is asked to classify, perceive, or analyze one or more pieces of knowledge with differing degrees of inference. To define and articulate answers, certain activities enable the respondent to create context through broader text or execute multi-step processes. To answer correctly, several tasks often require the participant to ignore unnecessary or incorrect information. Competing evidence is always present, but it does not overshadow the right information. Competing evidence exists, and it may seem to be as popular as right information at times.
Level 4 326–375	Participants are often required to execute multiple-step processes to combine, translate, or synthesize data from complicated or lengthy continuous, non-continuous, mixed, or multiple type texts at this stage. To complete the mission effectively, complex deductions and the application of context information could be required. To translate or test subtle evidence-claim or effective discourse relationships, several tasks necessitate finding and interpreting one or more unique, non-central idea(s) in the document. At this stage, conditional input is often involved in activities and must be considered by the participant.
Level 5 376–500	At this stage, tasks can include searching for and integrating material through various, dense texts, constructing syntheses of related and opposing ideas or points of view, or evaluating evidence-based claims. To complete assignments, it may be necessary to apply and evaluate logical and philosophical models of concepts. It is often necessary to assess the authenticity of evidentiary sources and pick key facts. Participants are often required to be mindful of implicit rhetorical signals and draw high-level inferences or use advanced context skills to complete tasks.

Source: <https://nces.ed.gov/surveys/piaac/litproficiencylevel.asp>.

PIAAC Proficiency Levels for Literacy which is essentially what this chapter will use to assess literacy levels across South America are similarly used across international bodies like UNESCO, PISA, and OECD for literature on literacy. It is prudent to take a look at these levels of literacy for broader comprehension.

3.5. LITERACY IN ARGENTINA

The school system in Argentina has not evolved smoothly. Many school policies were politically driven and discriminatory, and a later administration overturned one government's reforms. In 1946, 1955, 1966, and 1973, political upheavals degraded the teaching profession, transforming the nature of the universities each time. The reality that Argentina's educational system is a labyrinth of parallel institutions and administrations, each with the right to determine educational relations, further hindered growth. This redundancy is costly and inefficient, and difficult to adjust.

While the literacy rate of Argentina is 99%, the reality is not clear from this statistic. According to recent reports, about 54.0% of Argentina's adults were unable to attend primary-school schooling, only 14.1% had completed high school, and only 4.0% had graduated from university. More than 9 million individuals are not educated beyond primary school, according to the Ministry of Culture and Education. The main hurdle to improving education over the last few years has been insufficient funding, and the tensions between the public education system and the state have been persistent (Warren, 2005).

Argentina's student scores in reading, mathematics, and science were lower than the OCED average.

In comparison to the OECD norm, a lower percentage of students in Argentina attained the maximum rate of proficiency (Grade 5 or 6) in at least one subject. In contrast, a higher proportion attained the lowest level of proficiency (Level 2 or higher) in at least one topic.

48% of students in Argentina have at least Level 2 literacy skills (OECD average: 77%). These students should, at a minimum, define the key concept with a moderate text, locate details based on precise but often complex requirements and focus on the intent and type of the text.

Approximately 1% of students in Argentina were top readers, meaning they scored Level 5 or 6 on the PISA reading exam (OECD average: 9%). Students at these levels may gain a thorough comprehension of a text whose substance or format is new, as well as work with topics that are contradictory to standards. More than 10% of 15-year-old students became top performers in 20 school systems, including those in 15 OECD countries. In Argentina, 31% of students achieved Level 2 or higher in mathematics (OECD average: 76%). These students should, at a minimum, perceive and recognize how a (simple) condition can be interpreted mathematically (e.g., measuring the overall distance between two alternate routes) without

direct guidance options or price conversion into a different currency). The percentage of 15-year-old students who graduated from high school who scored minimum standards of mathematics proficiency (Level 2 or higher) ranged considerably, ranging from 98% in Beijing, Shanghai, Jiangsu, and Zhejiang (China) to 2% in Zambia, which took part in the PISA for the first time in 2017 development assessment that was conducted.

In Argentina, 47% of students received a Level 2 or higher in science (OECD average: 78%). These students should at the very least provide alternative hypotheses in familiar situations and draw conclusions based on basic inquiries.

In Argentina, only a small number of students were top science performers, suggesting they were proficient at Levels 5 and 6. (OECD average: 7%). These students may give us an insight into their knowledge of and about science in several contexts, including those that are new to them, imaginatively and autonomously (Valencia, 2005).

In PISA 2018, socioeconomically advantaged students in Argentina outperformed impoverished students in reading by 102 marks. This is greater than the average contrast between the two categories in OECD countries (89 points). In PISA 2009, the socioeconomic position achievement deficit in Argentina was 123 points (and 87 points on average across OECD countries).

In the PISA 2018 reading test, 2% of advantaged students and 0% of deprived students in Argentina were the best scorers. In the OECD countries, 17% of advantaged students and 3% of poor students were top readers.

In all PISA countries, socioeconomic status was a good predictor of mathematics and science results. It accounted for 21% of the variation in mathematics performance in Argentina in PISA 2018 (especially in contrast to 14% on average across OECD countries) and 19% of the variance in science performance in Argentina (compared to the OECD average of 13% of the variation).

Approximately 8% of poor students in Argentina achieved reading proficiency in the top quarter of the country, demonstrating that deficiency is not fate. In the OECD countries, 11% of poor students were among the best readers in their respective countries.

In all countries and economies that took part in PISA 2018, girls outperformed boys in reading by 30 points on average around the OECD. In Argentina, the gender difference in reading was smaller (16 points) than the national average. The distance was smaller than in 2009 (37 points),

as boys' performance increased and girls' performance held constant over time. In Argentina, boys outshone girls by 15 points in mathematics. Boys outperformed girls by five points around the OECD nations. In PISA 2018, while girls narrowly beaten boys in science (by two score points) on average across OECD nations, boys outscored girls in science by 10 score points.

According to UNESCO, Argentina has a 99% adult literacy record. Just a few countries have higher female literacy rates than men; in Argentina, 99.06% of all women aged 15 and older are literate, relative to 98.94% of men (Verger et al., 2016).

In comparison to other neighboring states, it has a high literacy rate even though in recent years, the literacy rate has decreased.

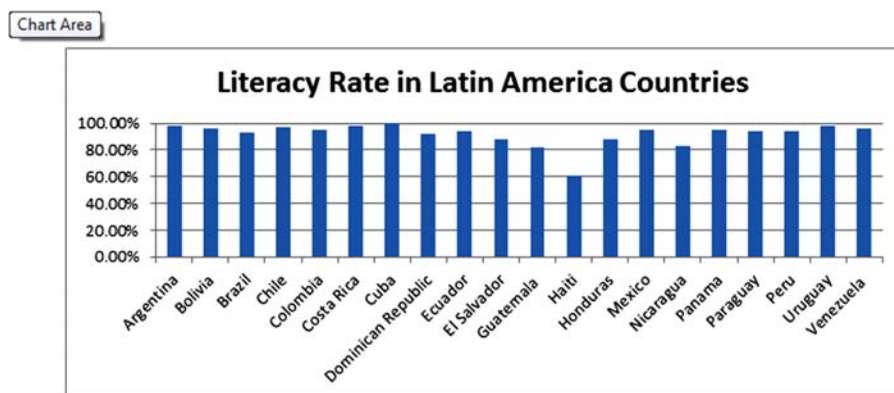


Figure 3.3: Literacy rates in Latin America.

Source: <https://sites.google.com/site/las111literacy/home/graph>.

3.6. LITERACY RATES IN BOLIVIA

Education in Bolivia has a division between rural and urban areas, as in many other areas of Bolivia's existence. Rural analphabetism continues to be strong, even though the rest of the world is being trained. Bolivia spends 23% on infrastructure, which is more than in most other countries of South America but on a smaller national budget. There have been several major moves to a systematic school overhaul. The transition started in 1994 with decentralized education funds aimed at satisfying varied local demands, improving teacher preparation and curricula, officializing and expanding bilingual intercultural education, and changing the grade system. Primary education is free and officially obligatory for children aged 6 to 13, though

school attendance can be difficult to achieve in some regions. Secondary school, which lasts up to four years, is optional. About four-fifths of primary-age children attended school at the end of the twentieth century, but only about one-fourth of secondary-age children did. The majority of education is funded by the government, although private institutions are allowed. Schools are operated by Roman Catholic, Protestant, and Jewish groups.



Figure 3.4: Literacy class in the El Alto section of La Paz.

Source: https://en.wikipedia.org/wiki/Education_in_Bolivia#/media/File:Bolivia_la_paz_literacy_LOC.jpg.

Adult literacy had rapidly risen to around four-fifths of the adult population by the end of the century from the 1950s when most Bolivian Indians were analphabets. Except for Cobija (the capital of the Pando department), each of the country's eight state universities is based in the departmental centers, and there are various private colleges, including a Roman Catholic university. The University of San Andrés (founded 1930) in La Paz and the Major University of San Simón (1832) in Cochabamba are

the two main institutions of higher learning. However, some of the intended changes have been reduced in the opposition of teachers' unions.

Adult literacy courses are coordinated by the Bolivian Ministry of Education and Culture. Around 350 centers and over 2,000 teachers were devoted to the education of children by the mid-1980s. More than one-third of the population was in the department of La Paz. The initiative did, however, have little impact; gains in adult literacy, which stood at 1293% in the middle of the 1980s, were largely due to higher primary enrolment. The number of children of primary school age enrolled in schools rose from 76 to 87% between 1973 and 1987.

Most training expenses have been allocated to the administrative budgets, in particular staff costs. Due to metropolitan centers, expenditure remained skewed. About 60% of 59,000 teachers working in urban schools were hired in Bolivia. The recession in the early and mid-1980s had a serious effect on education expenditure. True educational expenses were calculated to be less than 40% of the total reported in 1985 by analysts. The share of the gross domestic product for education fell from 3% to less than 2% during the same time.

Although there was some change in the school sector in the 1970s and 1980s in attendance, significant difficulties continued in the 1980s. The number of high school students increased twice as much like that of that age group; the population of university students rose four times as rapidly as the overall population of 18–24-year-olds. Secondary school persisted, however; only 35% of qualifying ages completed secondary school, which is outside the reach of most Bolivians. There were also significant differences in male and female registration rates (Velázquez Barriga, 2020).

Efforts to raise the number of women faced the harsh economic realities of impoverished families that depended on the assistance of their daughters with work and childcare.

At the end of the 80s, drop-outs were still very strong. Only one-third of the first graders graduated from the fifth grade, 20% started middle school, 5% started post-secondary, and just 1% graduated from university. Girls and rural children had higher dropout rates. After the third grade, only about 40% of rural young people pursued their education.

At the end of the 1980s, Spanish was the instruction language at any stage. Critics accused rural school children of a high drop-out rate due to a lack of bilingual education (or intercultural bilingual education,

respectively). Long before Spanish conquerors brought their language to the New World, indigenous communities throughout Bolivia had developed their communication systems, including Aymara, Quechua, Guarani, Tacana, Besiro, Yuracare, Yawinawa, and Chiman, all languages being taught today.

The rate of adult literacy, according to UNESCO Bolivia, is 92.46%. While male literacy is 96.52%, 88.58% is used for women. The ranking of literacy rates is 79° compared to the rest of the world. In recent years, the literacy rate has dropped.

3.7. LITERACY RATES IN CHILE

Chile's school system is divided into 8 years of free and obligatory basic (primary) education, 4 years of discretionary secondary or professional education, and (variable) years of higher education, structured in the 19th-century German and German models and widely respected Latin American countries. Over 90% of Chileans aged 15 years and older are educated. Private schools owned by religious communities, ethnic groups (including German, French, Italian and Israeli), and private educators are relatively enrolled and are catering to wealthy families.

The proportion of adults in Chile who have the highest literacy, digitally, and problem-resolution skills in high-technology environments is far less than the OECD average.

The most proficiency level (level four or 5) in literacy in Chile is just approximately 1 in 60 adults (1.6%), in comparison to approximately one in 10 adults (10.6%) in the OECD countries that took part in the study on average. The proportion of adults with these rates ranges by age from 1.5% of aged 16–24 (9.6 points below the OECD average) to almost 0% of aged 55–65 (The OECD average is 4.8%).

Chile's university education is well-respected in Latin America. The main institution is the University of Chile, with campuses in Santiago, Arica, Talca, and Temuco, which was originally established in 1738. The Santiago University of Chile and the Scientific University of Federico Santa María in Valparaíso are the German-style technological universities. Private universities include Santiago Catech University, Valparaíso Catholic University, Antofagasta Northern University, Concepción University, and Valdivia Southern University.

Level 4 allows adult knowledge to be integrated, translated, and synthesized from long or complicated texts with conditions of competing

information (see the table at the end of this section for more clarity about what adults may do at any level of proficiency). Around one out of eight adults (12.9%) reach levels 3, lower than the OECD average of 35.4%. Adult performers at this stage can properly comprehend and adapt to dense or long texts. They can recognize, interpret or test one or more pieces of information using the experience of text structures and rhetorical devices (Alzúa et al., 2015).

Approximately 1.9% of Chile's adults reach levels 4 or 5, well below the OECD estimate of 11.2%. Roughly 1.6% of young people aged 16 to 24 reach this level relative to the OECD average of 10.1%, and about 0% of people aged 55 to 65 reach this level, compared with the OECD average of 6.4%. At level 4, adults understand a wide variety of knowledge, which can be nuanced, abstract, or foreign. In Chile, one in 10 adults (10%) reaches level 3, down from 31.8% on average of the OECD.

A much higher proportion than the average of adults in Chile has low knowledge and expertise in numeracy. More than one in two adults (53.4%) in Chile have literacy skills, and nearly 61.9% have a Level 1 or lower score, respectively (39% points higher than the OECD average of 22.7%). Poor skills in reading and counting are especially common among 55–65-year-olds: about three in four adults with or under Level 1, while the OECD rate is less than 1 out of three for 55–65 years (around 30%). About 38.5% of the aged 16–24 have low literacy levels, and 52.7% are low digital literacy students (the OECD average is 19.3%).

The proportion of adults in Chile who have the highest literacy, digitally, and problem-resolution skills in high-technology environments is far less than the OECD average. The most proficiency level (level four or 5) in literacy in Chile is just approximately 1 in 60 adults (1.6%), in comparison to approximately one in 10 adults (10.6%) in the OECD countries that responded to the study on average. The proportion of adults who rate at this stage ranges by age, from 1.5% of 16 to 24-years-old (9.6% behind the OECD average) to nearly 0% between the ages 55–65 (the OECD average is 4.8%).

UNESCO Chile reports that it has a 96.4% adult literacy rate. While the rate of male literacy is 96.48%, it is 96.33% for females. The level of the literacy rate is ranking 54 according to the rest of the nations. In recent years, the literacy rate has dropped.



Figure 3.5: The oldest Chilean university is the Universidad de Chile. It was established in 1622 as the Universidad de Santo Tomás de Aquino.

Source: <https://www.scholaro.com/pro/Countries/Chile/Education-System>.

3.8. LITERACY RATES IN PERU

The Peruvian school system is employed for young people from early birth to graduation, but this system is far from universal by its restrictions and exclusions. A pre-primary education scheme is intended in the first six years to train primary education pupils. Peruvian children have access to free and compulsory primary education between 6 and 11 years of age according to the nation's legal requirements. From the ages of 12 to 14, children attend a single two-year secondary education curriculum in a general secondary school after completing primary education.

Students are split into two tracks at the close of the general secondary curriculum with a three-year course from 14 to 16. The Ciclo Diversificado Científico-Humanista, which awards a Bachillerato Académico upon fulfillment, is the more academic of these tracks. The second track, technical high school, grants a Bachillerato Técnico to students who complete it. Aside from the conventional three-tiered school system, the country also offers special education programs to almost 300,000 students per year. Students with cognitive and physical disorders, as well as mental instability, make up this group. Peruvian schooling is mandatory from the age of six to sixteen.

In 1999, Peru had 56,671 schools and 284,511 classrooms throughout the country, serving 7,553,011 students. According to the 2000 figures, 7.8 million pupils, with 6.7 million attending free state-funded institutions. Males account for marginally more than half of these students (50.5%).

Females dominated males by a ratio of 57 to 43 in the nation's 351,441 teachers. According to Ministry of Education figures, 96.9% of primary-age children and 85.9% of secondary-age children were enrolled in school in 1999, compared to 88.0% and 79.4% in 1993.

Rural children were significantly more likely to be older than the average age for their actual level of schooling at all stages of education, demonstrating the fragile nature of early-childhood services in rural areas. Likewise, rural students are far more likely than their urban peers to obtain academic support.

Despite being marginally underrepresented in primary and secondary schools, women's standing in Peruvian education has changed significantly after the Tejeda Ministry of Education started allowing women full involvement. Minorities' integration into the educational system, especially Native Americans, is still a work in progress (Vanegas, 2003).

The history of Peruvian education can be traced through several programs aimed at incorporating Native Americans into the system after independence. In the 1960s, the government enacted a new universal education bill that required the government to send a teacher to any neighborhood that built its schoolhouse. Hundreds of farming villages banded together to build a school in their midst as a result. Teachers' promises were kept by the Ministry of Education, which saw a significant increase in the number of qualifying students enrolled.

While recent changes and practices indicate that the school system is shifting away from an assimilationist mindset, Native American students have traditionally been treated and expected to see themselves as distinct and defectively "other." Many aboriginal people see schooling to bridge the gap between them and the mainstream society, pushing them to blend in. Also, in recent years, education has actively promoted the denigration of Native American culture, including urging students to forego western clothes and refrain from speaking the vernacular language.

In 1990, 72% of people reported that they only spoke Spanish, up from 60% in 1961. Approximately 18% of the population is fluent in Spanish and their native language, while around 10% are monolingual in their native tongue. While only 50% of the non-Spanish speaking population was registered in 1960, this figure still reflects a sizable portion of the country's future students. While Spanish remains the country's official language and the primary language of instruction, previous attempts to eradicate native languages have been abandoned.

The government has changed its Spanish-only policy in recent decades, transitioning from indifference to actively promoting and funding for bilingual education, mostly Spanish-Quechua and Spanish-Aymara, and the research and protection of different native languages. Current bilingual education programs in the Andean and Amazon regions of the country have resulted in significant improvements in literacy and educational achievement among those populations. Despite attempts to increase linguistic integration in government and education, literacy and fluency in Spanish remain a virtual necessity for participation in national living.

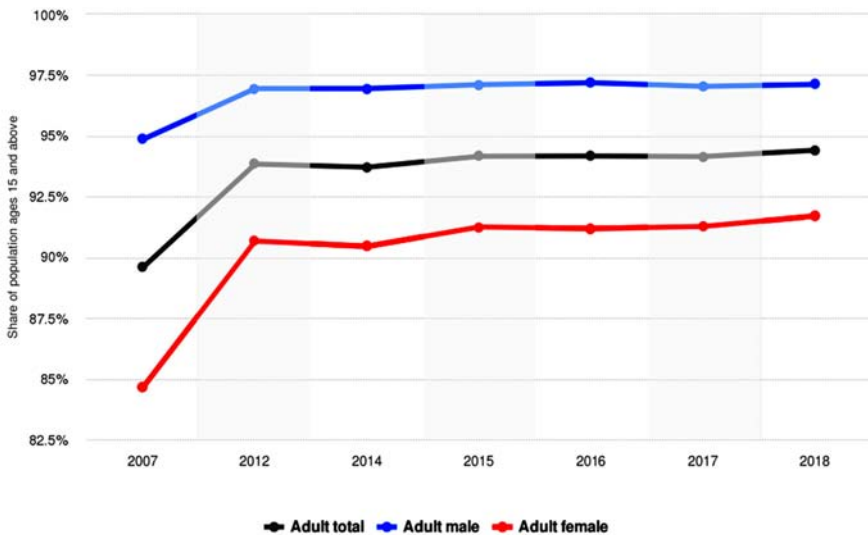


Figure 3.6: The statistic depicts the literacy rate in Peru from 2007 to 2018. The literacy rate measures the percentage of people aged 15 and above who can read and write. In 2018, Peru's literacy rate was around 94.41%.

Source: <https://www.statista.com/statistics/572791/literacy-rate-in-peru/#:~:text=The%20statistic%20depicts%20the%20literacy,rate%20was%20around%2094.41%20percent.>

3.9. LITERACY RATES IN SURINAM

Surinam is located on South America's northern coast, bordering Brazil, Guyana, and French Guyana. It has a population of 459,000 people. In 1975, Surinam declared independence from the Netherlands. The official language is Dutch, but other languages spoken include Sranan Tongo, Hindustani,

and Javanese. Surinam adopted the Dutch education system as a blueprint, and even after independence, Surinam continued to follow Dutch patterns. Before Surinam gained independence, the standard of education was considered comparable to that of the Netherlands.

Surinam's education is overseen by the Ministry of Education and Community Development.

The Surinamese government had declared changes in 2004. The reforms' main goal is to provide an 11-year basic education system that combines pre-primary, primary, and junior secondary school education. Pupils would have a greater general foundation as a result of the incorporation.

Reforms will be phased in overtime in higher education as well. Following basic education, the secondary school will be split into a 3-year general system and a 4-year vocational program. It is unclear whether these amendments will be enforced at this time (Torres & Schugurensky, 2002).

Since 2004, university education at Anton de Kom University has been divided into 3-year bachelor's and 2-year master's programs to prepare the announced improvements. Both public and private schools offer Surinam's education. Children aged 7 to 12 are required to attend school. The Surinamese government has changed the period of compulsory schooling as part of implementing 11-year primary education. The instruction is given in Dutch.

In 1993, there were 87,882 primary school students. There were 16,511 students and 2,487 teachers in secondary schools. In 1999, the pupil-teacher ratio in primary schools was reported to be 17 to 1. All children aged 6 to 16 are required to attend school, which is free of charge. If primary education lasts six years, secondary education is divided into two phases: four years of instruction supplemented by three years of instruction. The nation, as well as Roman Catholic and Protestant mission schools, provides free primary education. The school's official language is Dutch. In the year 2000, the adult illiteracy rate was calculated to be 5.8% (males, 4.1%; females, 7.4%). Education expenditures were projected to be 3.6% of GDP in 1995.

Five teacher-training institutions, five vocational schools, and the University of Suriname, a Law School and a Medical Science Institute, provide higher education. In 1990, there were 495 teaching staff at all higher-education schools, with 4,319 people registered. People have access to affordable higher education. Adult literacy is estimated to be around 89.6%. Terminal degrees are offered by teacher training establishments, elementary schools, and vocational schools. Nurses and dental technicians are trained

alongside medical students, although the requirements are not as high as in more developed countries. Medicine, law, natural resources, and social and technological sciences are among the faculties at Paramaribo's Anton de Kom University. Specific course credits are difficult, if not impossible, to pass to and from the United States. Non-Dutch speakers would still have a tough time enrolling. In the Netherlands, many students also attend high schools and colleges. An increasing number of people are studying in American universities.



Figure 3.7: The Anton de Kom University illustrated here was founded in 1968 and is the only state tertiary institution.

Source: <https://www.scholaro.com/pro/Countries/Suriname/Education-System>.

3.10. LITERACY RATES IN GUYANA

Guyana has made significant strides in enhancing educational access at all levels over the last decade by raising the number of qualified teachers, expanding access to interactive technologies, including computers, and updating physical facilities.

Despite this development, Guyana's education sector is still emerging from years of underfunding and faces several problems, including the consistency and equity of early childhood education programs, teaching quality, and the availability of accurate education data. Education spending in the public sector was 3.8% of GDP from 2006 to 2012.

Guyana's education sector strategy (ESP) 2014–2018 identifies two main objectives:

1. Growing learning results in all educational levels and subgroups.
2. Reducing learning disparities between subgroups, especially between students in coastal and hinterland schools
3. Literacy and numeracy are the most important learning outcomes, followed by science and technology. The following are some of the plan's outcome indicators:
 - By 2018, the number of grade 4 students who have mastered literacy will have increased to 50%.
 - Increasing the percentage of grade 6 students who score 50% or higher in core subjects to more than 40%.
 - Increasing the number of students who complete math, English, and science education in high school by 60%.

Guyana's school sector saw a significant downturn in the 1980s and 1990s. As the country's political and economic situation deteriorated, many teachers fled, searching for decent salaries and job stability. Schools were in disarray, and mismanagement was rampant. Educational reform and numerous improvements have resulted from a stable government and a stronger economy. Over the 1990s, school budget budgets gradually rose. Teachers received significant pay raises, but by the year 2000, some were already earning as little as \$100 a month. School administration has changed, and new schools are being established (Staab, 2010).

Despite recent increases in federal spending, the school sector is underfunded, and government expenses on education remain poor compared to comparable countries' education funding. Middle-income Latin American countries, for example, spent almost 16% of their spending on education in 1990, while the Guyanese government spent just 4.2%. Underfunding can have serious consequences. The school sector would be unable to recruit and retain eligible teachers if teachers are underpaid. A shortage of instructional materials and suitable learning facilities has also been attributed to a lack of funds.

When surveyed in 1995, almost a third of community high schools lacked a library. Management is inadequate and under-supervised in regional school districts. The Ministry has no idea where educational funds go. The Ministry's productivity and profitability have been harmed by low wages and understaffing. The system's lowest point continues to be teacher instruction. In 1994, about 55% of Guyana's nearly 2,000 nursery school

teachers had failed to pass the mandatory teacher exams. Under qualified teachers accounted for more than 80% of educators in the interior areas. Test scores show the impact of these factors on student success. In the 1990s, grades on the Secondary School Entrance Examination were chronically poor. The results on the CXC test were also disappointing. The number of students qualified for admission to the University of Guyana has decreased to the point that professors, labs, and workshops are underutilized. Poor attendance is also common in primary and secondary schools, and schools are grappling with that abuse and indiscipline, which is blamed for the 65% attendance rate.

The unlawful use of drugs, arson, pupil struggles, assaults on teachers, and cheating on tests have made school officials' issues even worse. The vocabulary used in school in rural areas is frequently different from the language used at home. Government spending favors high-school and secondary education, while elementary education funding is more needed. Due to these and other shortcomings and inequities, the probability of a pupil attending primary school is just 4%.

The administration has used many approaches to reform the education sector. The Guyana Education Access Project I is one of those initiatives. This five-year UK funding project helps to ensure fair access to high-quality secondary schooling for all Guyanese children and young people in two deprived areas. In a multi-phased program, the Secondary School Reform Project aims to establish a standard curriculum for Forms 1–3. This includes textbooks, teaching resources, educational libraries, and the promotion of community involvement. There will be twelve schools renovated and emergency renovations to other schools.

The objective of the project is to enhance school administration and organization. The National action plan was also created to address the basic needs of Guyanese children by raising the standard of day-care centers and primary schools, by improving them, by enabling those who left school without their schooling to learn reading and mathematical skills (Schoenig, 2013).

Better administration can address more funding-related issues in all aspects of the system. One of the reform's goals is to allocate funds evenly around the regions. Guyana's fight for improving the educational infrastructure, perhaps most encouraging, is its commitment to recognizing the need for change by national politicians and educators alike. They have defined concrete areas for change and are committed to achieving their objectives.

See also> HDI Emigrant stock						
Guyana - Literacy rate						
Date	Adult literacy rate female	Adult literacy rate male	Adult literacy rate	Adult literacy rate 15-24 female	Adult literacy rate 15-24 male	Adult literacy rate 15-24
2014	85.03%	86.31%	85.64%	97.04%	96.33%	96.69%
2009	87.25%	82.44%	84.99%	93.67%	92.42%	93.10%

Figure 3.8: Guyana – Literacy rate.

Source: <https://countryeconomy.com/demography/literacy-rate/guyana>.

The literacy rate for adults is 85.64% as per UNESCO Guyana. Guyana. While the rate of male literacy is 86.31%, 85,03% is for women. The literacy rate score is 950 in comparison with the rest of the nations. In recent years, the rate of literacy has risen.

3.11. LITERACY RATES IN PARAGUAY

Education spending in Paraguay has risen steadily, reaching 4.7% of GDP in 2000, up from 1.7% in 1989. A large portion of the additional money was used to lift teacher pay and upgrade curricula. From the ages of seven to thirteen, students are expected to attend kindergarten, and surveys show that Paraguay has a net primary school enrolment rate of 92%. And the fact that public education is free to all, dropout rates remain high.

Until the 1990s, Paraguay's entire population was represented by the state's Universidad Nacional de Asunción and the Universidad Católica Nuestra Señora de Asunción. The state founded ten new universities as part of the educational developments of the 1990s. For the first time in 2003, female cadets were accepted to Paraguay's national military academy, allowing women to further their education.

In 2003, the average literacy rate in Paraguay was 94%, with relatively little difference between men and women. In rural areas, illiteracy rates are higher than the national average. According to the 2001 census, 15% of women and 10% of men living in rural areas were illiterate.

Even though Paraguay has made significant strides in ensuring equitable access to education for all citizens, such as through its numerous national and international adult literacy projects, access to educational programs among the country's rural population remains severely limited. The female rural population living in abject poverty or extreme poverty has the least entry (Somers et al., 2004).

Despite progress in lowering the country's illiteracy rate, equitable access to education remains a major challenge; after all, illiteracy is one of the leading causes of social exclusion and, therefore, a problem that Latin American countries must address aggressively.

According to UNESCO, the adult literacy rate in Paraguay is 94.02%. The male literacy rate is 94.51%, while the female literacy rate is 93.53%. In comparison to the rest of the world, it ranks 76th in terms of literacy rate. In recent years, the literacy rate has decreased.

3.12. LITERACY RATES IN URUGUAY

Uruguay has a high literacy rate that is equal to that of the majority of developing countries. For children aged 6 to 11, education is free at all levels—primary, intermediate, technical school, and university. Montevideo is the country's educational capital. The University of the Republic (1849) is home to a number of faculties, including a prestigious medical school that attracts students from all over the country. The Catholic University of Uruguay, founded in 1985, is a well-known private university. The privately funded Institute of Higher Studies (1931) is dedicated to basic education, while the Uruguayan Labor University provides technical training (1878).

In 1985, Uruguay had the highest literacy rate in Latin America, with 96%. Male and female literacy rates did not vary significantly, although there were differences between urban and rural literacy rates (rural rates demonstrably lower). Uruguay's universal, private, and secular education scheme allowed students to attend school for a total of eleven years, from the ages of six to fifteen. For a long time, the percentage of children in primary school who were enrolled in school was almost 100%. Besides that, the number of children of secondary school age enrolled in any kind of secondary school increased from 44% to 70% between 1965 and 1985, the highest rate in Latin America.

The percentage of people enrolled in postsecondary education was below 20%. In all levels of schooling, coeducation was the rule, and females and males attended in almost equal numbers. However, as in any region, schooling rates were higher in urban areas than in rural areas.

Uruguay's educational system was deemed to be of a good standard. Teaching was a well-respected and well-paid career in the community. The majority of teachers who received their education at teacher training colleges were regarded as highly educated. The lack of adequate classrooms,

teaching resources, and teachers' aides was the primary issue facing the educational system (Senechal, 2010). Uruguay has only two public universities: The University of the Republic, established in 1849, and the Universidad Tecnológica del Uruguay, founded in 2012, as well as four private universities: The Universidad Católica del Uruguay (www.ucu.edu.uy), Universidad ORT Uruguay (www.ort.edu.uy), Universidad de la Empresa (www.ude.edu.uy), and the Universidad de The University of the Republic offered free tuition to those who had earned a bachillerato, or a diploma for completing all periods of general secondary education.

Uruguay – Literacy rate

Date	Adult literacy rate female	Adult literacy rate male	Adult literacy rate	Adult literacy rate female 15-24 female	Adult literacy rate female 15-24 male	Adult literacy rate female 15-24
2018	99.01,	98.37%	98.70%	99.17%	98.60%	98.88%
2017	98.96%	98.23%	98.62%	99.32%	98.56%	98.93%
2016	98.85%	98.24%	98.56%	99.44%	98.87%	99.15%
2015	98.87%	98.15%	98.52%	99.23%	98.64%	98.93%
2014	98.81%	98.03%	98.44%	99.39%	98.31%	98.84%
2013	98.64%	98.06%	98.36%	99.31%	98.56%	98.93%
2012	98.66%	98.10%	98.40%	99.30%	98.63%	98.96%
2011	98.62%	98.02%	98.34%	99.12%	98.61%	98.86%
2010	98.49%	97.61%	98.07%	99.23%	98.36%	98.78%
2009	98.53%	97.97%	98.27%	99.23%	98.51%	98.86%
2008	98.46%	97.83%	98.16%	99.32%	98.63%	98.97%

Figure 3.9: Uruguay – Literacy rate.

Source: <https://countryeconomy.com/demography/literacy-rate/uruguay>.

But besides the free tuition, accessibility to university education was still restricted to children from middle and upper-class families, as the need to boost family income by jobs, along with the cost of books and other costs, put a university education out of reach for many. Furthermore, the fact that the only public university in the country was in Montevideo greatly restricted anyone from the interior to attend university unless their families were economically well-off. Montevideo accounted for about 69% of university students in 1988.

Uruguay has a 98.7% adult literacy rate, according to the United Nations Educational, Scientific, and Cultural Organization (UNESCO). Just a few countries have higher female literacy rates than men; in Uruguay, 99.01% of all women aged 15 and older are literate, compared to 98.37%. As compared to other nations, it ranks 34th in terms of literacy rate. In recent years, the literacy rate has risen.

3.13. LITERACY RATES IN FRENCH GUYANA

French Guiana is a territorial community in South America that has been an administrative area of France since 1946. In terms of area, French Guiana is the second-largest French department, but it is also the second-smallest in terms of population. Because French Guiana is a part of French territory and is subject to the same national laws and policies as the rest of France, it is treated as a separate community. This suggests that the State has delegated some authority to French Guiana to administer its territories under the public rule. In this regard, it enjoys some autonomy from France in terms of regional policies.

Enrolment rose by 70% in elementary schools and 87% in high schools between 1980 and 1993. Children between the ages of 6 and 16 are required to attend free education. Except for the more rural areas of the nation, such as the communities of the Amerindians and Maroons, where resources are much scarcer, primary education lasts for five years, and school attendance is approximately 100%.

3.14. LITERACY RATES IN VENEZUELA

The Venezuelan Ministry of Education is in charge of education in the country. On UNESCO's Education for All Development Index, Venezuela was ranked 59th out of 128 countries in 2010. Education is required for nine years. September to June–July is the academic year.

Despite the boom of oil riches, education was largely ignored under President Juan Vicente Gómez in the early twentieth century. Just 35% of the school-age population was registered a year after his death, and the national literacy rate was below 20%. A student rebellion in 1928 sparked the formation of the Generation of 1928, which would later become the center of the democratic movement. Several Bolivarian Missions, including Mission Robinson (primary education, including literacy), Mission Ribas (secondary education), and Mission Sucre (tertiary education), rely on education as part of the Bolivarian Revolution's social services (higher education). (Ross Schneider, 2021).

The Venezuelan government claimed to have trained 1.5 million Venezuelans to read, but according to the report, "only 1.1 million were illiterate, to begin with," and that the illiteracy decline of fewer than 100,000 can be due to adults who died while they were elderly.

The literacy rate in Venezuela rose from 77% to 93% in the 1970s, when the country witnessed massive growth due to oil sales. In 2007, 95.2% of Venezuelans aged 21 and up could read and write, making it one of the most literate countries in the region. In 2007, male literacy was projected to be 95.4%, and female literacy was reported to be 94.9%. In 2008, Francisco Rodriguez of Wesleyan University in Connecticut and Daniel Ortega of IESA reported that during the Chávez regime, there was "no evidence" of a "statistically discernible impact on Venezuelan illiteracy."

According to Iván de la Vega, a sociologist at Simón Bolívar University, reports appeared in 2014 showing many education workers fleeing Venezuelan academic positions, along with the millions of other Venezuelans who had fled the country under Hugo Chávez's presidency. According to the Association of Professors, about 700 faculty members at Venezuela's Central University left between 2011 and 2012, most of whom were considering the next wave of professors. Simón Bolívar University has lost some 240 faculty members. The cause for emigration is allegedly due to Venezuela's high crime rate and low wages.

The exodus of educational workers in Venezuela, according to El Nacional, has caused a shortage of teachers. The Center's director, Mariano Herrera, estimates the lack of mathematical and scientific teachers to be around 40%. Out of convenience, several teachers began teaching several classes and moving students. Via the Simón Rodríguez Micromission, the Venezuelan government aims to address the teacher shortage by reducing educational specialist graduation qualifications to two years.

As per UNESCO, Venezuela has a 97.13% adult literacy rate. In a few Member States alone, female literacy is higher than male; in Venezuela, 97.21% are literate than 97.04% of women aged 15 years and older. The literacy rate is 47% as opposed to other neighboring states.

In 2016, Venezuela (Bolivarian Republic adult)'s literacy rate reached 97.1%. Venezuela's adult literacy rate rose from 89.8% in 1990 to 97.1% annually in 2016 by an average rate of 1.32%, respectively.

Literacy among adults (15+) (percent): The total proportion of the population aged 15 years and over is those who can read and write a concise, straightforward comment about their daily lives with comprehension. 'Literacy' also usually includes 'numeracy,' which means that you can calculate arithmetic simply. This indicator is computed by dividing the number of students aged 15 years and over and multiplying 100. In 2016, Venezuela (Bolivarian Republic adult)'s literacy rate reached 97.1%. Venezuela's adult literacy rate rose from 89.8% in 1990 to 97.1% annually in 2016 by an average rate of 1.32%, respectively (Angell, 2002).

3.15. LITERACY RATES IN BRAZIL

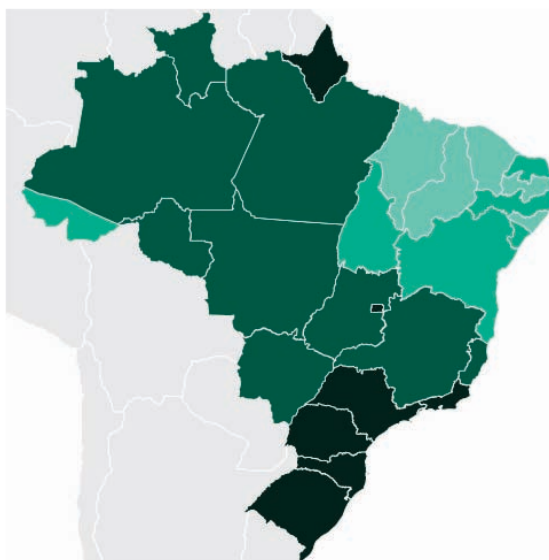


Figure 3.10: Brazilian states by literacy rate.

Source: [https://en.wikipedia.org/wiki/List_of_Brazilian_states_by_literacy_rate#/media/File:Brazilian_States_\(Literacy_Rate\).svg](https://en.wikipedia.org/wiki/List_of_Brazilian_states_by_literacy_rate#/media/File:Brazilian_States_(Literacy_Rate).svg).

Literacy among adults (15+) (percent). The total proportion of the population aged 15 years and over can read and write a concise, straightforward comments about their daily lives with comprehension. 'Literacy' also usually includes 'numeracy,' which means that you can calculate arithmetic simply. This indicator is computed by dividing the number of students aged 15 years and over and divides the quantity by 100.

A National Education Plan was enacted by the National Congress of Brazil in 2001, defining 26 priorities to be met by 2011. The promises include giving a nine-year primary school to all children aged 6 years or above, which is now eight years old; the elimination of analphabetism and giving up to 50% to children aged 15 years and above, leading to first four degrees in 5 years and up to 8 years in 10 years. The objectives are ambitious for a world with 170 million inhabitants and an over-a-century very high education debt.

Population 15 years old and over (A)			Enrollments of students 15 years old and over				B+ C/A%
			Youth and Adult Education (B)		Regular Education (C)		
Level of schooling	Age groups	n	1 st to 4th grade	5th to 8th grade	1st to 4th grade	5th to 8th grade	
No	15 to 24	5347268	394091	-	1419148	-	33.9
schooling to 3ri grade	25 and over	27873991	403210	-	330902	-	2.6
From 4th to 7th graph-icCe	15 to 24	11621139	-	821276	-	6176694	60.2
	25 and or	25949005	-	572084	-	457257	4.0
TOTAL		70791403	797301	1393360	1750050	6633951	14.9

Figure 3.11: Population 15-years-old and over by level of schooling and enrollments in Youth and Adult Education and Regular Education (Brazil, 2000).

Source: <https://www.dvv-international.de/en/adult-education-and-development/editions/aed-672006/literacy-for-life/commitments-and-challenges-of-a-literate-brazil>.

In 1990, 81% of the overall population over the age of 15 are reported to have been literary, or 19% an alphabetized (because their very own name cannot be signed). The amount of analphabetism was not taken but was even higher. The incapacity to read newspapers and send messages were not calculated (an estimated 60%). In remote regions of the northeast and northeast, where the statistics are compared with those in Africa and urban areas in the south-east and south, and where the figures are comparable with those of the industrialized world, analphabetism is the strongest in most social metrics.

In 2001, a National Education Plan, which identified 26 priority targets to be achieved by 2011, was promulgated by the National Congress of Brazil as a statute. The promises include giving a nine-year primary school to all children aged 6 years or older, which is now eight years old; the elimination of analphabetism and giving up to 50% to children aged 15 years and older, leading to first four degrees in 5 years and up to 8 years in 10. For a nation with 170 million inhabitants and a huge education deficit accumulated for over a century, the objectives are bold (Robert, 2012).

It does not ensure that this privilege is made effective by the use of such an advanced legal criterion. Education in Brazil has, of course, made huge strides in recent years; the country has been able to make entry to schools nearly universal to girls, reaching a distribution ratio of 97.2% for ages 7–14 in 2003. The education system is nevertheless confronted with great problems and very poor productivity. Millions of teenagers leave school before completing primary school and swell the number of young people and adults who are inadequately educated, as it is 70.7 million.

The Brazilian students scored below the 10 OECD countries average and economies evaluated in 2015 in financial literacy. Brazil is the last active country and economies with an average ranking of 393. The overall result in 2015 in Brazil does not vary substantially from Peru's median. More learners in Brazil score at or below level 1 than at any other level of competence.

In 2015, students in Brazil scored lower than the average of the ten OECD countries and economies measured in financial literacy. Brazil scores last among the 15 participating countries and economies, with a mean score of 393 points. Brazil's overall average in 2015 is not substantially different from Peru's average performance. At the end of the nineteenth century, Brazil has had census statistics on illiteracy. Since then, the rates have steadily declined, from 65.3% in 1920 to 13.6% in 2000. It is not clear in

any of the times that a sharper fall may be traced to the great anti-illiteracy movements waged over the generation.

Even though the law provides special schooling for children and adults, a significant percentage of students 15 and older are enrolled in Regular Education. In principle, Standard Primary Education can serve children of regular school age (7 to 14-years-old). Aside from children who take longer than normal to complete Primary School, an increasing number of older adults have enrolled in Regular Education in recent years. This distortion is caused by the processes that govern education funding in the region, which do not encourage states and municipalities to provide YAE, as discussed further below.

All across the twentieth century, as regular basic education programs started to be coordinated and extended, adult education became the subject of interventions that took the form of promotions, providing short-term classes, and mobilizing non-professional literacy monitors. Among the more important national-scale programs were 1947–1950, which served 830,000 people in 1950, and the Brazilian Literacy Movement served 7.3 million people between 1970 and 1972.

Chapter 4

Educational Attainment in South America

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4.1. INTRODUCTION

The Americas are technically divided into two continents: North America and South America. North America includes Central America and the Caribbean. It falls entirely under Latin America (referring to countries whose residents speak primarily Spanish and Portuguese. These two languages are classified as Romance languages, derived from Latin), including Central America and the Caribbean, and some states in North America (Mexico). The double continent is mainly in the Western Hemisphere, bounded on the west by the Pacific Ocean, east by the Atlantic Ocean, north by the Arctic Ocean, and south by the Southern Ocean.



Figure 4.1: South America contains 12 countries and 2 dependencies.

Source: <https://www.britannica.com/place/South-America>.

South America is the southernmost part of the landmass known as the New World, the Western Hemisphere, or the Americas. The continent is approximately three-sided and compact in form, long in the north and tapering in the south—Cape Horn, Chile. South America is limited northwest and north by the Caribbean Sea, northeast by the Pacific Ocean, and southwest. The Panama Isthmus connects the northwest, a land bridge that is narrowed to approximately 50 miles (80 km). South of Cape Horn, Drake Passage divides South America from Antarctica (Arrueta & Avery, 2012).

South America is 17,840,000 square kilometers in size (6,890,000 square miles). Its population was projected to be over 423 million in 2018. Formalized paraphrase South America is the fourth-largest continent (after Asia, Africa, and North America) and the fifth-most populous (after Asia, Africa, Europe, and North America). With more than half of the continent's population, Brazil is by far the most populated South American state trailed by Colombia, Argentina, Venezuela, and Peru. Brazil has also produced half of the continent's GDP in recent years and has emerged as the continent's first regional power.

The majority of the population lives on the continent's western or eastern coasts, with the interior and far south being thinly inhabited. The Andes Mountains overwhelm the landscape of western South America; in comparison, the east portion features both highland areas and extensive lowlands where rivers such as the Amazon, Orinoco, and Paraná flow. The tropics cover the majority of the continent.

Given the country's long history of slavery, most South Americans speak Portuguese or Spanish, and cultures and states are influenced by Western values. Compared to Europe, Asia, and Africa, South America was a stable continent with few conflicts in the twentieth century.

4.2. THE CONCEPT OF EDUCATION ATTAINMENT

attainment of a level's learning goals, which are usually verified by evaluating learned experience, abilities, and competencies, is referred to as successful completion of a level of education.

The highest education curriculum completed, and is usually accredited with a recognized certification, is generally used to assess educational attainment.

Educational attainment should present results at the primary and secondary levels of the highest grade tier completed in the highest educational

attainment group. It will be used to assess partly achieved certificates at the postsecondary level in the class “any postsecondary education (highest)” in the highest educational achievement group, which encompasses those that have earned some education that can be applied for a postsecondary certificate but no postsecondary certification. Only the highest academic program successfully achieved is classified as the highest qualification, diploma, or degree. As a result, below the level of achieved postsecondary qualifications, the ranges of the two classifications are not strictly equivalent (Ramírez Plascencia, 2018).

Educational attainment may be determined simply by a single query that refers to the person’s highest qualification, diploma, or degree. It may also be taken from answers to a series of questions, one of which inquiries about the person’s possession of a particular qualification, credential, or degree. It may also be taken from a single question that asks about any of the person’s qualifications, diplomas, or degrees. If included, data on the highest partially completed certification can be extracted by integrating data on the highest certificate, diploma, or degree obtained with one or more questions on whether the individual has completed any schooling at a given level.

Educational attainment has a sense of conformity to relevant internationally recognized standards.

This criterion is consistent with the concept of educational attainment is given in the United Nations Educational, Scientific, and Cultural Organization (UNESCO) Institute for Statistics’ International Standard Classification of Education (ISCED) 2011

An individual’s educational attainment is described as the highest ISCED degree that the individual has achieved. Educational achievement is generally assessed in terms of the highest education program successfully achieved and is typically certified with a recognized certification for organizational purposes.

Educational programs are classified under ISCED, which also provides a breakdown of educational achievement standards. To represent the terminology used to characterize education standards in Canada, this standard contains classifications other than the ISCED classification.

This norm further aligns with ISCED 2011 in terms of the concept of “good” completion and the incorporation of certificates issued by provincial or federal governments that accept informal learning abilities as equal to conventional education qualifications (Poppema, 2009).

With the introduction of the ISCED 2011 concept of educational attainment, this criterion is no longer entirely compliant with the United Nations' Principles and Recommendations for Population and Housing Censuses, the definition of educational attainment. Educational attainment is described narrowly in the UN text as "the highest grade completed within the most advanced degree attended," meaning that partly completed credentials must be included in the assessment.

In contrast, the ISCED 2011 concept does not mandate that partially completed qualifications be used in educational attainment measurement; in effect, their incorporation is an exception to the norm. "(f)or organizational purposes, educational achievement is generally assessed concerning the highest education program successfully achieved, and is normally accredited with a validated certificate," according to ISCED 2011 while noting that partly completed credentials are another choice for classification. This criterion requires the classification 'Highest qualification, diploma, or degree,' which excludes partly completed credentials from its assessment.

4.3. EDUCATIONAL ATTAINMENT IN COLOMBIA

During the Spanish age of colonization, modern education was founded in Colombia by the Catholic Church. In the 16th century, the first schools were founded to educate the children of the colonizers. The foundation of Catholic religious schools and a few colleges followed, including Colombia's oldest university, Saint Thomas University, was founded in Bogotá in 1580. The school system stayed strictly elitist until the early nineteenth century when the country gained independence.

After independence, the state of Colombia was progressively in charge of education management, even though the Catholic Church has managed to dominate education intermittently long into the twentieth century under various governments. In 1870, basic schooling in public schools was declared free and obligatory. At first, however, the Church resisted universal schooling and slow development in remote areas to increasing attendance. Just in 1970, about 70% of rural school-age children did not attend school.

Almost 77% of rural schools had one classroom, while 80% had one teacher in rural schools. Few students were long at classes. Infrastructure was poor—21% of students were without desks."

Moreover, secondary training was largely a luxury for urban residents. It was only widely distributed nationwide by the end of the last century, when

the secondary gross enrolment ratio rose from 43% in 1981 to 74% in 1999, one of the highest growth rates in Latin America.

The higher education system expanded as the number of secondary school students rose. The tertiary, gross enrolment ratio increased by just 5% at the end of the century in 1972 to 23%. Around the same time, with smaller demand-absorbing privately-owned institutions complementing state Colleges, private Catholic universities, and other Higher education institutions, the system has gradually diversified. More short-term programs were developed and conventional degree programs in technical disciplines in common fields such as business management. The number of higher education programs in Colombia grew from 3,600 to 6,276 in just a decade, from 2001 to 2011 (Patron, 2006).

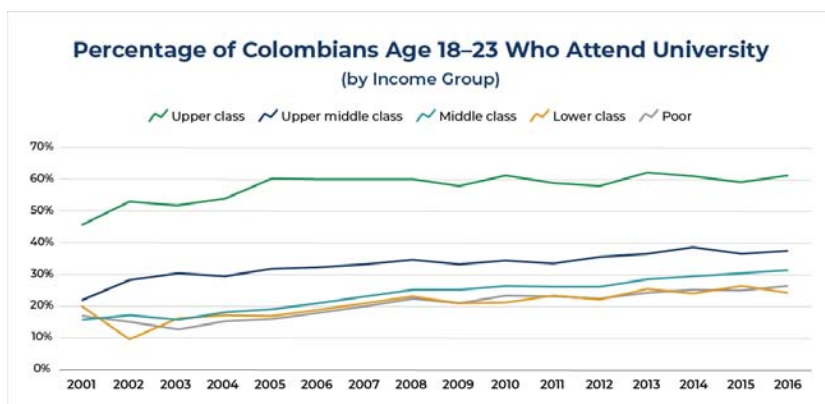


Figure 4.2: Percentage of Colombians who attend university.

Source: [https://wenr.wes.org/2020/06/education-in-colombia-2#:~:text=School%20education%20in%20Colombia%20comprises,\(grades%2010%20and%2011\).](https://wenr.wes.org/2020/06/education-in-colombia-2#:~:text=School%20education%20in%20Colombia%20comprises,(grades%2010%20and%2011).)

The number of higher education programs in Colombia grew from 3,600 to 6,276 in just a decade, from 2001 to 2011.

As a consequence of the rapid massification, Colombia formed a diverse higher education environment characterized by substantial qualitative inequalities between highly selective and lower-level service universities. Another problem was that, amid these quality compromises, higher education remained subject to blockages. According to the OECD, just 55% of the overall number of students who were enrolled was in 2011, defining the absorption rate of Colombian Higher education institutions.

Many Colombian aspirants remain shut out of the region's higher education system with a rapidly increasing tertiary, gross enrolment ratio.

According to the World Bank sources of development metrics collected from of

ficially recognized sources, educational attainment, at least Bachelor's or equivalent, population 25+, female (%) (cumulative) in Colombia was recorded at 12.34 % in 2018, according to the World Bank sources of development metrics collected from officially recognized sources. Colombia – Educational attainment, at least Bachelor's or equivalent, population 25+, female (cumulative) – actual values, historical data, estimates, and predictions were derived from the World Bank in May of 2021.

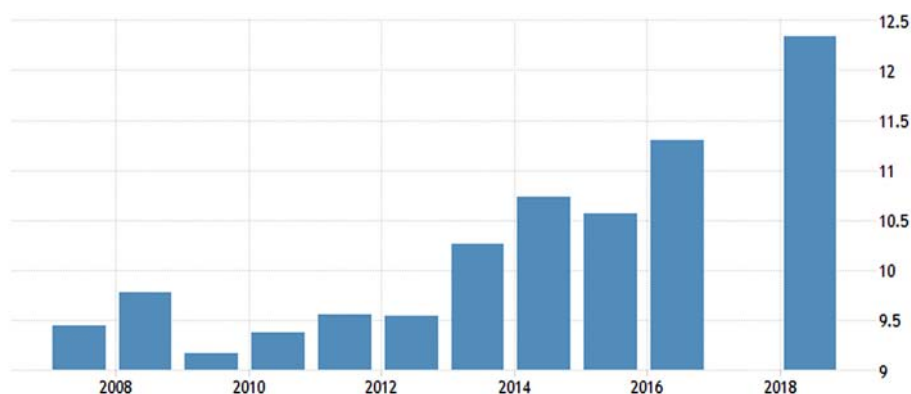


Figure 4.3: The percentage of population ages 25 and over that attained or completed Bachelor's or equivalent.

Source: <https://tradingeconomics.com/colombia/educational-attainment-at-least-bachelors-or-equivalent-population-25-female-percent-cumulative-wb-data.html>.

Colombia has among the lowest rates of tertiary-educated adults globally, with only a small number of people planning to enroll in doctoral programs. However, within OECD nations, having a tertiary degree holds the second-highest earnings value.

Colombian young women have higher college attainment but lower earnings than their male counterparts. Full-time female employees with a tertiary education paid about 20% less than equally trained men in 2017.

Stronger commitment is required to improve exposure to and standard of early childhood education and care in Colombia: The system has low

enrolment rates for children aged 3–5 years, low levels of spending, and the highest ratio of children per teacher among OECD countries (Payne et al., 2002).

Colombian teachers with comparable educational experience earn the same salary at all levels of education, but teaching time varies. Secondary teachers in Colombia are required to teach 120 fewer hours a year than primary teachers, but secondary teachers have an average of 7 more students per teacher.

4.4. EDUCATIONAL ATTAINMENT IN VENEZUELA

Venezuelan education is extremely centralized and is governed and supervised by the Venezuelan Ministry of Education. The first nine years of education are obligatory (*educación básica*) and are conducted in Spanish. After nine years of basic education, pupils are channeled into either the arts or the sciences at the wide-ranging secondary education level (*educación media diversificada*), which lasts two years and contributes to the *bachiller* distinction. Secondary students can also choose a two- to three-year advanced education (*educación media profesional*) that leads to the award of a technical degree.

Education is provided free of charge to all students at all levels of the structure; however, private schooling is common, especially at the secondary level. The ministry oversees all public and private schools, which all follow the same requirements.

Given the centralized structure of the education system, President Hugo Chávez's 14-year reign was revolutionary at all levels, particularly at the tertiary level. Under Chávez's Bolivarian Missions community outreach initiative, which began in 2003, an emphasis on literacy and university preparatory services massively increased educational opportunities for formerly marginalized communities from the country's poorest regions (Parra, 2009).

In combination with the advent of free university admissions and the establishment of new public colleges, university promotion initiatives have helped increase enrolments from 670,000 in 1998 to nearly 2.5 million today.

In 2003, the Bolivarian University of Venezuela founded a new university for the masses, with admission open to everyone regardless of previous educational background, credentials, or nationality. The university currently has over 180,000 students enrolled, targeting eventually enrolling

one million students at campuses around the country. Graduates of the school, which currently has about 200,000 students, must serve with other social services within the larger Social Missions network, such as free public health clinics, literacy centers, and government media outlets. Critics of the new organization see it as an extension of the government's propaganda machine, governed by Marxist ideology, and a further threat to the country's conventional ideas of university autonomy.

Traditionally independent universities, long the domain of Venezuela's upper and middle classes, have worked valiantly against government threats to intellectual independence and institutional autonomy.

The country's six independent state universities are the country's largest and most influential, operating as conventional multi-faculty institutions. They are both government-financed and self-regulated. However, their power to conduct their selection procedures was removed in 2009 as part of an update to the Organic Education Law. In recent years, university shareholders have fought hard to maintain their independence by vigorously opposing numerous versions of a proposed amendment to the 1970 law that governs universities in the region.

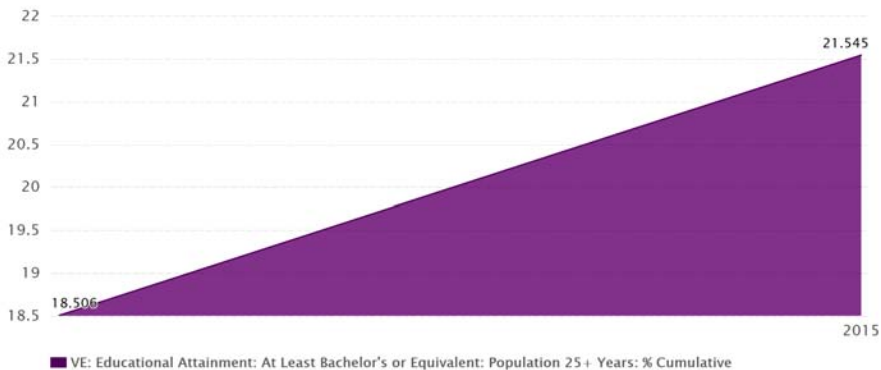


Figure 4.4: Venezuela's Educational Attainment: At Least Bachelor's or Equivalent: Population 25+ Years: Total: % Cumulative from 2011 to 2015 in the chart.

Source: <https://www.ceicdata.com/en/venezuela/education-statistics>.

However, the establishment and expansion of new public universities and new public financing programs have left independent universities chronically poorly funded and in flux.

Ten national experimental universities are now entirely outside of state regulation. There have a limited number of faculties that are mostly focused on academic and vocational subjects.

Newer public universities, such as the 200,000-strong Universidad Bolivariana, founded by decree in 2003, offer open enrolment and are tightly controlled by the central government. For the past decade, these universities have been the main driver behind the dramatic increase in tertiary enrolments.

4.5. EDUCATIONAL ATTAINMENT IN ECUADOR

The Ecuadorian Constitution mandates all children to attend school till they reach a “basic standard of schooling,” which is expected to be nine school years. In 1996, the net primary enrolment rate was 96.9%, with 71.8% of students completing the fifth grade. As of 2001, there were no data on primary school enrolment in Ecuador.

Although enrolment rates show a degree of dedication to schooling, they do not always represent children’s school attendance. The government pays for elementary and secondary schooling, but households also incur substantial extra costs such as tuition and transportation (Nygren, 2016).

State expenditure on education fell in actual terms and as a percentage of GDP in 2000. GDP expenditure had risen from 2.6% to 5.2% by 2012. Almost 235,000 adults, or about 14% of the population aged 18–24, were enrolled in higher education institutions during the 1998–1999 academic years. About 80% attend public universities, while the remaining 20% attend private universities. More than 60% of students attend the Central University of Ecuador, the National Polytechnic School, or the Universidad San Francisco de Quito. Graduation rates at public universities are rarely higher than 15%.

To support the aim of universal literacy, the network of public education has been significantly extended. As mentioned, primary schooling is free and mandatory for six years. Ecuador has made strides in providing education to marginalized classes, ethnic groups, and women. Independent religious and nondenominational schools still play an important part. However, population growth and insufficient resources have put significant pressure on the school system. Efforts are being made to tailor the program to Ecuador’s diverse cultural heritage.

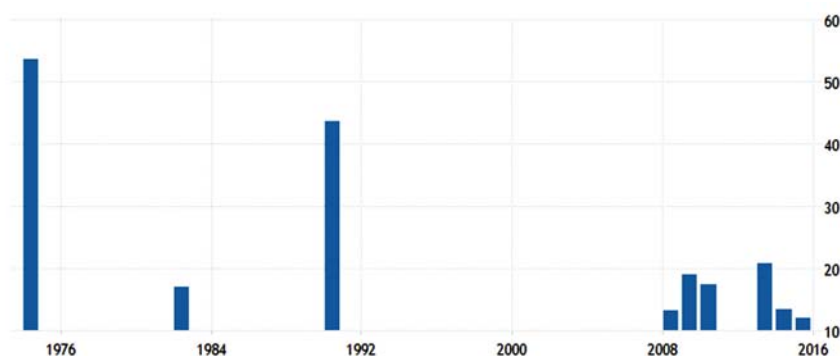


Figure 4.5: The percentage of population ages 25 and over that attained some primary education as the highest level of education.

Source: <https://tradingeconomics.com/ecuador/educational-attainment-some-primary-population-25-years-total-percent-wb-data.html>.

Secondary schooling ranges from overcrowded high schools to selective private schools emphasizing bilingualism in English, French, or German. The Pontifical Catholic University of Quito is the most prestigious university in the country, with research programs in botany, archaeology, linguistics, and anthropology. It (along with other universities in Quito) draws many studies abroad students from the United States and Europe. The Polytechnic School in Quito has excellent scientific programs and an exemplary monitoring and research center for volcano and earthquake risks.

The public sector is split into two parts: The local system, which is run by counties, and the government system, which the Ecuadorian Ministry of Education manages. There are significant differences in the standard of instruction offered by public and private institutions. The public sector is free, but, in reality, schools have such restricted funds that families are required to share in purchasing instructional supplies and in certain activities (cleaning the classroom, doing some restoring, painting, and so on.).

In terms of the private system, religious schools (primarily Catholic), bilingual schools, international schools, and some overseas schools are available in the major cities (Quito, Guayaquil, and Cuenca) (American, French, etc.) Private school fees vary greatly depending on the school (from 300USD per month to 1500 USD per month). Interestingly, private education is much more common in Ecuador, not just among expatriate families but also among Ecuadorian families who can finance it. As a result,

certain schools are oversubscribed, and enrolment is often performed in a “first come, first served” situation (Mizala & Schneider, 2014).

Most research is conducted outside of universities. The Pan-American Center for Geographical Studies and Observation at the Military Geographical Institute in Quito conducts geographical and environmental research and postgraduate study. Some environmental institutes, museums, and labs are housed in the same building. There are various social science institutes, especially in Quito, including a local Latin American Faculty of Social Sciences unit. The National Institute of Agricultural Investigations’ laboratories is the epicenter of agricultural science. Foreign aid agencies in France and the United States support major academic institutions.

According to the World Bank’s list of growth indices collected from officially accepted references, educational attainment, some primary, population 25+ years, overall (%) in Ecuador was registered at 11.95% in 2015. Ecuador – Educational attainment, some primary, population 25+ years, overall – real values, historical statistics, estimates, and predictions were obtained from the World Bank in May 2021.

4.6. EDUCATIONAL ATTAINMENT IN GUYANA

In Guyana, education is primarily funded by the government of Guyana through the Ministry of Education and its various branches in the country’s ten provinces. Guyana’s education scheme is a holdover from its tenure as British Guiana. It is close to that of the Caribbean Community’s other Anglophone member states, all members of the Caribbean Examinations Council (CXC). The central government establishes school curricula, funding, standards, and other regulations enforced by the Ministry of Education and relevant agencies.

The School System is divided into eleven districts, ten of which belong to the country’s national political and regional areas, with Georgetown being considered as a distinct education district. Guyana ranks alongside Cuba, Iceland, Denmark, and Botswana as one of the few countries that invest the most in education, at 8.3% of GDP.

The legal age to initiate compulsory schooling is five years and nine months, and students must attend school before they reach the age of sixteen. Children who do not fulfill the compulsory school-age requirement are often enrolled early or enter a kind of pre-school. Students join public schools to fulfill compulsory education standards;. However, there are a few private

schools that provide education at one or more levels of learning, home-schooling is nearly non-existent in Guyana. Except for President's College, the academic year runs from September to July of the next year, and students have a five-hour school day.

Until the mid-1990s, free education from nursery to university was the standard in Guyana outside of the private sector. Education is currently subsidized from kindergarten to graduate school, with some tertiary institutions requiring students to pay fees.

This growth marked a change from Guyana's status as the socialist-inspired Cooperative Republic in the 1970s. In the 1970s, the country's educational policies aimed to increase access to schooling, as education above primary school was costly and aimed largely at the nation's tiny elite. Single-gender schools were made co-educational in the 1970s, and private and parochial schools were integrated into the public sector. The change was part of a larger trend in post-colonial CARICOM, which aimed to provide an education that represented independent countries' full heritage and ambitions.

Regional requirements also guide Guyana's educational parameters and evaluation protocols as part of its commitments to the CXC. In classes, students wear uniforms.

Guyana's population over the age of 15 has a reading literacy rate of 92%. Despite this high degree of reading literacy, a large portion of the Guyanese population struggles with practical literacy, leading to a lack of employability and other socioeconomic drawbacks; as a result, the government and humanitarian organizations have pushed education as a medium for poverty reduction.

Guyana is one of the top-ranked developed countries in the United Nations Human Development Report's Education Index.

Its overall rank is 37, but it is third in the Caribbean after Cuba and Barbados and second in South America after Argentina, with a ranking of 0.943 on the Education Index. Guyana has accomplished the Millennium Development Goal of universal primary education, according to DFID, but remains challenged with increasing access to adequate secondary education. Guyana's schools allow little to no educational technology such as interactive whiteboards or other technological resources since it is one of the poorest countries in the Western Hemisphere.

Background characteristic	Highest level of schooling						Don't know/missing	Total	Number of women	Median number of years of schooling ³
	No education	Some primary	Completed primary ¹	Some secondary	Completed secondary ²	More than secondary				
Age										
6-9	11.8	86.6	0.2	0.5	0.2	0.0	0.8	100.0	985	1.2
10-14	0.9	39.8	12.2	46.2	0.3	0.2	0.5	100.0	1,258	5.5
15-19	1.4	4.6	2.7	60.6	26.7	3.4	0.6	100.0	1,127	9.1
20-24	1.1	6.3	4.8	28.9	45.9	11.7	1.2	100.0	879	10.2
25-29	1.6	10.0	6.8	34.0	35.2	11.6	0.9	100.0	736	9.8
30-34	1.9	12.0	7.4	38.3	26.7	11.2	2.6	100.0	720	9.3
35-39	1.7	9.4	11.9	41.0	26.0	7.7	2.2	100.0	761	9.1
40-44	1.7	20.0	11.5	35.6	22.8	4.8	3.8	100.0	663	8.3
45-49	2.2	18.4	12.4	33.9	20.8	7.1	5.2	100.0	658	8.0
50-54	2.6	21.6	19.4	28.0	17.0	6.0	5.4	100.0	582	6.5
55-59	2.0	31.3	18.6	20.6	15.8	6.4	5.3	100.0	440	5.7
60-64	2.8	29.7	32.0	13.0	11.5	4.5	6.6	100.0	275	5.5
65+	7.3	30.7	28.8	11.4	6.8	4.4	10.6	100.0	678	5.3
Residence										
Total Urban	1.8	17.7	9.1	31.8	24.6	10.8	4.3	100.0	2,861	8.9
Georgetown (urban)	1.3	15.8	8.7	30.3	27.1	11.7	5.2	100.0	1,874	9.3
Other (urban)	2.8	21.2	9.7	34.6	20.0	9.1	2.5	100.0	987	8.1
Total Rural	3.5	28.8	11.6	32.9	17.2	3.5	2.4	100.0	6,918	6.7
Total Coastal	2.6	24.7	10.9	32.6	20.3	6.1	2.9	100.0	8,718	7.6
Coastal (urban)	1.8	17.7	9.1	31.8	24.6	10.8	4.3	100.0	2,861	8.9
Coastal (rural)	3.0	28.1	11.8	32.9	18.2	3.8	2.3	100.0	5,857	6.9
Total Interior	6.8	32.9	10.1	33.0	11.6	2.1	3.4	100.0	1,061	5.7
Region										
Region 1	11.7	42.9	10.2	24.8	5.3	1.7	3.4	100.0	367	4.3
Region 2	4.9	30.2	16.3	29.0	13.5	3.7	2.4	100.0	608	5.7
Region 3	3.5	27.6	8.1	35.9	19.5	3.6	1.8	100.0	1,327	7.3
Region 4	2.0	21.7	9.8	31.6	23.0	7.7	4.2	100.0	4,139	8.3
Region 5	2.0	28.6	15.1	28.7	18.2	5.5	1.9	100.0	698	6.5
Region 6	2.9	28.2	13.8	33.0	17.9	3.3	1.1	100.0	1,537	6.6
Region 7	4.2	26.4	10.7	35.2	17.3	3.1	3.0	100.0	228	7.0
Region 8	2.8	22.8	10.9	41.9	14.6	2.1	4.9	100.0	166	7.5
Region 9	5.5	35.7	10.1	31.9	12.6	0.8	3.4	100.0	170	5.6
Region 10	2.8	18.9	5.6	41.9	17.6	10.5	2.6	100.0	537	8.4
Wealth quintile										
Lowest	7.2	38.2	12.8	29.2	7.7	1.0	3.9	100.0	1,726	5.2
Second	3.7	29.4	13.2	35.6	13.7	2.0	2.5	100.0	1,955	6.3
Middle	1.6	24.6	10.9	36.8	20.3	3.0	2.8	100.0	1,926	7.7
Fourth	1.8	22.7	10.5	33.4	22.7	6.2	2.9	100.0	2,086	8.0
Highest	1.6	15.3	7.2	27.9	30.3	14.8	2.8	100.0	2,086	9.6
Total 2009	3.0	25.6	10.8	32.6	19.4	5.6	3.0	100.0	9,778	7.4
Total 2005	3.5	27.1	13.3	35.1	12.8	6.2	2.1	100.0	4,446	8.6

Figure 4.6: Educational attainment of the female household population. Percent distribution of the de facto female household population age 6 and over by highest level of schooling attended or completed, and median number of years completed, according to background characteristics, Guyana 2009.

Source: <https://dhsprogram.com/pubs/pdf/FR232/FR232.pdf>.

4.7. EDUCATIONAL ATTAINMENT IN SURINAME

In Suriname, funds play an outsized part in a student's achievement or failure at any educational stage. About 85% of pupils complete primary school, free and mandatory for children aged 5 to 12.

As the figures are broken down, though, the impact of income on the Surinamese education system becomes clear. Just 62% of the poorest students complete primary school, while 98% of the richest students do. At the next level of schooling, lower secondary, the gap widens to 77% for the wealthiest and 23% for the lowest.

Suriname is experiencing a public education crisis. Thousands of Surinamese schoolchildren are being left behind due to socioeconomic differences in wealth, geography, and ethnicity. While nine out of ten Surinamese children begin primary school, only about four out of 1,000 Surinamese children complete upper secondary education. The disparity at the upper secondary level is becoming much more evident, with 52% of the richest completing education and just 6% of the poorest completing upper secondary education in Suriname (Meade & Gershberg, 2008).

Suriname's rural areas have a lower rate of educational attainment than the rest of the country. There are no upper secondary schools in the Sipaliwini, Coronie, or Brokopondo districts, and as a result, there are no residents aged 21 to 23 who have completed their schooling. Suriname has a chronic shortage of trained teachers in rural areas, in addition to a lack of classrooms. Educational problems abound in rural areas, posing significant challenges for youth.

Suriname's schools are usually in bad shape. Many rural schools lack toilets, drinking water, and electricity, and many of those that were destroyed during the civil war in the 1980s have yet to be rebuilt. If educational materials are given, they will arrive several weeks after school starts, assuming they are not stolen. The situation is so bad that the government has launched a national building program with support from other nations. There are no junior or senior high schools in the interior areas. In addition, the standard of teaching differs between urban and rural areas.

In addition, the standard of teaching varies between urban and rural areas. Only about 30% of students in the interior qualify for admission to the academic track of junior secondary school, compared to about half of students in the Paramaribo district.

While education is readily available, especially at the lower levels, and most Surinamese can afford to send their children to school, the number of eligible graduates stays weak, owing to high dropout and repetition rates, inadequate teaching, a shortage of educational materials, and dilapidated school buildings. Surinamese children begin education at the age of nine, but only about four out of every 1,000 complete senior secondary schools.

For those who never join or drop out, special services have been created, but they are unable to handle the load.

Apathy has become a concern in the educational sector as well. Less than 1% of students in teacher education schools want to be teachers. Teachers' morale is low in schools due to low wages, inadequate equipment, and a shortage of instructional materials. Teachers' salaries fell by four-fifths in real terms between 1980 and 1994, leading to an outflow of eligible teachers who could find work elsewhere. Many teachers do not show up for work, even though they are still paid.

Finding teachers able to work in remote coastal districts or the interior has long been a challenge. Many teachers feel underprepared for their jobs due to putting academically deficient and unmotivated students into teaching positions. To filter out low motivated and academically deficient candidates, the system requires a different entry test for teacher-training colleges from the national examination. This would improve teaching in the system.



Figure 4.7: Surinamese Students.

Source: <https://borgenproject.org/education-in-suriname/>.

Suriname provides educational assistance from various countries, the most notable of which are the Netherlands and Belgium. The Dutch also provided primary school instructional materials and equipment, especially in the interior, establishing apprenticeships in vocational-technical education and promoting higher education. Many foreign education aids have been at the tertiary level, in the form of funding for the University of Suriname and

scholarship services to help Surinamese students study overseas. Educational attainment for a cumulative population of 25+ years at a level for those at least completed primary stands at 90% in Suriname, but this doesn't reflect on the Surinamese education system.

4.8. EDUCATIONAL ATTAINMENT IN FRENCH GUYANA

French Guiana is a French overseas region administered by the French Constitution on the northeast coast of South America, bordering Brazil and Suriname. There is a French-style educational structure in place.

Enrolment rose by 70% in elementary schools and 87% in high schools between 1980 and 1993. Children between the ages of 6 and 16 are required to attend free education. Except for the more rural areas of the land, such as the communities of the Amerindians and Maroons, where funds are much scarcer, primary education lasts for five years, and school attendance is approximately 100%.

Secondary schooling is divided into two cycles: a four-year curriculum that eventually results in the Brevet de College review and a three-year program that ultimately ends in the Baccalaureat examination, which must be passed to enter tertiary institutions.

The country's higher education options are restricted to teacher training and agricultural schools and the University Antilles-Guyane, which provides postsecondary programs in management, French language and literature, and law. Many students go to universities in France or the French Antilles to further their studies. Educational attainment levels of at least completed post-secondary for a population aged 25+, the total is 2.26 as of 2002.

In terms of education, there is a scarcity of instructional materials in the classrooms. Teachers have had to redesign the resources available to deal with this challenge. Teachers had to build an abacus out of seeds to show children how to count. They created percussion instruments by beating them with sticks to teach music. This is in stark contrast to the French metropolis, where most schools have actual musical instruments, laptops, and projectors. Teacher education is still ignored. In 2011–2012, 53% of teachers in charge of education were undertrained and struggled to hold their students' interest.

Teachers hired in French Guyana, on the other hand, are marked by both their extraneity in the middle of their practice, as well as their inexperience and territorial insecurity, making any preparation transient. The consequence

is a lack of understanding of the classroom environment in the department, its demographics, and its languages and cultures among these instructors. Consequently, despite a rise in the number of teachers, they are mostly seasonal, and their lack of awareness of the local background prevents them from properly carrying out their tasks (Matos, 2016).

Furthermore, the program is not tailored to French Guiana's historical and geographical context. "They know the kings of France, the castles, the Loire and the Seine," a father of three children in French Guiana said, "but they don't even know the gap between Cayenne and Saint-Laurent, and they've never learned of the Tumuc-Humac Mountains." This witness emphasizes the lack of integration of school curricula, resulting from the generalization of schooling in French Guyana during departmentalization, which was related to a core philosophy of assimilation.

To solve the challenges posed by French Guiana, new public policies for school reform were implemented in the territory in 2013. The most pressing challenges were education quality and equity, which required special focus in Guyana's hinterland and remote river areas, where education facilities were deemed below national expectations.

The first issue was a teacher shortage as well as a lack of instruction. The first curriculum reforms, implemented in 2013, centered on increasing teacher capacity and expanding the availability of teaching resources. Teachers learn how to tailor lessons to the needs of children and how to develop an experience that encourages their learning and imagination as a result of this curriculum. Teachers use formal instructions to track their pupils more closely and on a more consistent basis. This contributes to improved learning outcomes. The number of employees has grown regarding the strong rise of the school population: over the past ten years, the number of teachers has increased by 44%, while the number of administrative staff has risen by 24%.

4.9. EDUCATIONAL ATTAINMENT IN PERU

Peru has flowered economically in recent years after severe inflation and political insurgency in the 1980s and 1990s. It has also become a significant tourism destination. This is mirrored in the educational sphere, with a growing influx of international students coming to the country to train for short and long-term programs. In reality, there are more American students in Peru today than there are Peruvian students in the US. Despite this, the nation continues to face difficulties in providing fair educational opportunities

to its entire people. Peru's government enacted education reforms in 1996 that made public school education free and obligatory for all students aged 5 to 16, recognized as "educación básica" (general stream) and "técnico productiva" (technical). However, since about a quarter of the appropriate age group does not participate in upper secondary school, the secondary cycle of compulsory education is rather ambitious. This is particularly true in the country's interior, where the Amazonian rainforest is unpopulated and remote areas of the Andean Highlands are lightly populated (Manacorda et al., 2010).

Private schools exist at all levels of the educational system, while public schooling is free. As mandated by a 2008 ministerial order, schools in both the public and private sectors adopt the national curriculum established by the federal government and supervised by local education authorities.

From March to November/December, the academic school year is completely found within one calendar year. Since Peru is located in the southern hemisphere, autumn starts in March, and summer vacations are taken from December to February. In July, there is also a winter holiday, but the exact date varies by country.

The nation's university system is the primary provider of higher education. In Peru, there are 51 public (Nacional) universities and 89 private (particular) universities, both for-profit and non-profit. Much formal literature, music, and religious establishments, such as conservatories, institutes, and colleges of higher education, are part of university-level institutions.

Tuition at public colleges is free. Many of Peru's best universities are independent, non-profit institutions. Nevertheless, the proliferation of independent, for-profit colleges around the country has raised concerns about quality standards in the private sector as a whole.

A majority of Peru's private universities will be subject to quality management inspections to decide if they will be able to continue running, according to a recently enacted university law (January 2015).

In 2013, 331,593 students enrolled in private colleges, and 697,518 students enrolled in public universities, bringing the total undergraduate enrolment to just over one million. In Peru, the Sistema Nacional de Evaluación, Acreditación y Certificación de la Calidad Educativa (SINEACE – National System of Evaluation, Accreditation, and Certification of Higher Education) is a fledgling accreditation framework. It was established by law in 2006 and is supervised by CONEAU at the university level and CONEACES at the tertiary non-university level; enactment began in 2008.

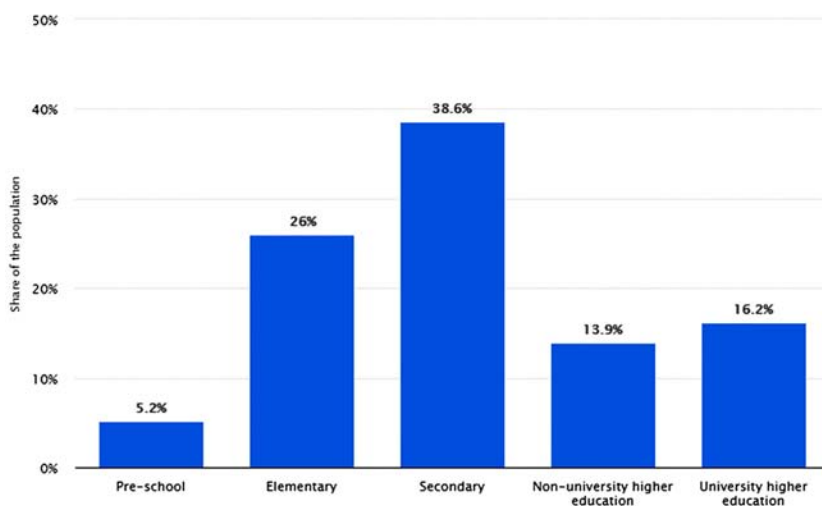


Figure 4.8: Level of education of the population aged 25 and older in Peru in 2017.

Source: <https://www.statista.com/statistics/705901/education-level-population-of-peru/#:~:text=In%202017%2C%20more%20than%2038,to%2042%20billion%20Peruvian%20soles.>

Institutional and program accreditation, as well as technical recognition, are all mandated by the statute. But for teacher training programs and 14 health science projects, the process is voluntary. Accreditation activities are currently focused on services rather than agencies. Self-study is supplemented by external assessments in this phase.

According to the COMEAU website, 1,306 systems are conducting self-evaluation studies at the moment, although only 7 are being evaluated externally. Just 15 programs have achieved certification approvals that are favorable. On the CONEAU webpage, there is no evidence that any organizations have failed the procedure.

4.10. EDUCATIONAL ATTAINMENT IN CHILE

Chile has had a lengthy economic growth and stability period compared to its regional rivals, making it the most prosperous nation in Latin America by most economic measures, even though that income is distributed inconsistently across society. In terms of education, this rising national

development has – in part – resulted in increasingly rising tertiary enrolments and increased access to all sectors of society. However, with 80% of students already studying at a private institution of higher education, this enrolment increase has almost entirely been within the private sector and driven largely by market factors. This has sparked questions over consistency and price and louder and more violent demands for change.

Student-led marches have meant that school reform is now front and center on the national agenda, beginning in 2011. Michelle Bachelet, Chile's expected next president, has made promises of school reform integral to her latest political campaign. Her imminent return to power (she was president from 2006 to 2010, and run-off elections are scheduled for December 15) comes after four years of right-wing rule that was wildly controversial among student leaders (Luque, 2017).

Students are asking that tuition fees be abolished, that public support be raised, that academic rates be improved, and that profiteering in higher education is prohibited. Former student activists have been able to leverage their political momentum into national office, with none more prominent than newly appointed Communist Party Deputy Camila Vallejo, who has extended radical prestige to Bachelet's campaign (and possibly herself) Bachelet's Nueva Mayoría (New Majority) alliance.

In 2012, the private sector recruited 56% of the nation's 620,000 university students, four times the number recruited in any university program in 1994. According to government data released by the UNESCO Institute of Statistics, three decades since tuition fees were legalized, 80% of students at the tertiary level are enrolled in the private sector.

In 2010, the country's total tertiary enrolment ratio was a regionally high 59%, with more than half of young Chileans (19–24) enrolled in a higher education college. On the other hand, the retention rate was a much smaller 19%, indicating that the scheme enrolls more students but struggles to get them through to graduation.

Chilean universities are reportedly among the most expensive globally compared to per capita income, which is undoubtedly a factor in the country's high dropout rate. Chilean households are expected to contribute more than 75% of the expenses related to higher education, opposed to 40% in the United States and just 5% in Scandinavian states on average.

In contrast to the tertiary sector, private secondary schools typically teach to a higher standard than their public counterparts, creates an environment – not unique in Latin America – where students from wealthy families

earn state-subsidized university places by charging for high-quality private secondary schooling while publicly taught secondary students to go to lower-quality public secondary schools in far greater numbers. Chile has the lowest public spending on higher education as a percentage of GDP among OECD nations, according to a new report by the OECD and the World Bank.

Chilean public universities earn more than 80% of their operational budgets from places other than tax incentives on average. This is mostly in the form of tuition fees, which necessitate substantial loans for the less fortunate to offset their bills. In terms of revenue and cumulative enrolments, the program is one of the most privately run in the country.

It stays to be seen if a (likely) new left-leaning Bachelet administration, after two decades of neoliberal dominance on the country's higher education institutions, will respond to demands for change from trustees and student leaders.

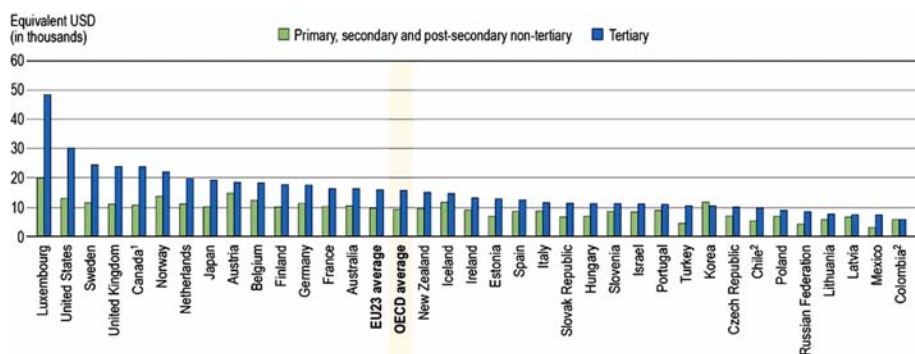


Figure 4.9: Total expenditure on educational institutions per full-time equivalent student, by level of education (2016).

Source: https://www.oecd.org/education/education-at-a-glance/EAG2019_CN_CHL.pdf.

Bachelet pledged free access to higher education, reduced tuition rates, and the closure of for-profit colleges during her presidential campaign. This would be a major shift from her former presidency, where she was a staunch opponent of student calls for open public universities. The Ministry of Education must sanction all higher education institutions before they can run. The Ministry's arm, the Consejo Nacional de Educación, is in charge of this. The mission, academic programs, services, and finances of the HEI

must all be certified by the Consejo. It is then in charge of overseeing and managing the HEI's structural growth and progress.

4.11. EDUCATIONAL ATTAINMENT IN ARGENTINA

Economists sometimes ask themselves, "What happened to Argentina?" Argentina was one of the ten wealthiest countries globally at the turn of the twentieth century, with per capita incomes higher than France or Germany. The country's economic growth and almost limitless prospects attracted refugees from Europe and Latin America. Between 1870 and 1930, approximately 7 million people moved to Argentina, the majority of who came from Italy and Spain. Buenos Aires was a thriving city in 1914, with an indigenous community of more than 50% of the total population (Lustig et al., 2013).

Argentina has been seen as a rising economic success on many occasions since then. Still, it has also undergone prolonged stretches of economic instability, struggling to live up to its maximum economic potential. Argentina's economic success over the last 100 years has been characterized as "a century of stagnation" by *The Economist*. The 44.3 million-strong South American country is now an upper-middle-income economy, ranking 58th out of 191 countries in GDP per capita in 2018 (behind other Latin American countries like Panama and Uruguay).

Argentina has one of the smallest numbers of people aged 25 to 64 who have a master's or similar tertiary education degree. (1.4%, 2019 rank 38/43) and one of the highest proportions of 55–64 year-olds with a general degree at the upper secondary or post-secondary level is found among OECD countries states with available data. (23.4%, 2019 rank 10/37).

Amid these high enrolment rates, Argentina's school system yields significantly fewer university graduates as a share of the population than neighboring Brazil or Chile's structures. Argentina has one of the highest tertiary dropout rates in the world in 2010, according to a 2013 report. Just 27% of Argentinian students completed their studies, resulting in a 73% dropout rate, comparable to 50% in Brazil, 41% in Chile, and 39% in Mexico. In comparative studies, such as the OECD PISA report, Argentinian students also fare badly. Argentina was ranked 57th out of 64 countries in 2012, behind Chile, Mexico, Uruguay, and Brazil. According to a World Bank study of Argentina's educational results, there was practically no increase in Argentina's PISA success between 2000 and 2012. However, countries such

as Brazil, Chile, Colombia, Mexico, and Peru also saw substantial improvements.

What is obvious is that Argentina's educational sector has significant geographical inequalities. Argentina is a vast and culturally diverse nation, with the eighth-largest total area in the world. There are major gaps between more rural provinces and urban centers such as Buenos Aires, which enrolled 43.4% of all elementary, secondary, and non-university higher education students in 2015. Argentina has a central government, and the various provinces have a great deal of jurisdiction in terms of education. To list a few examples, regional inequalities occur in terms of ease of access to school, educational content, educational budgets, facilities, and teacher salaries.

Grossly unequal educational conditions in various jurisdictions represent these inequalities. According to government figures, ninth-grade graduation rates in 2015 ranged from 66% in Neuquén to 88% in La Rioja. Similarly, in grade 12, desertion figures ranged from 11% in Corrientes to 32% in Tierra del Fuego. Another example: in Tucumán, the number of older students enrolled in grade eleven ranged from 27% to 52%.

Many of these changes have contributed to Argentina's secondary and higher education systems becoming more homogeneous than they were at the turn of the century. Despite this, standardized schooling in the vast country remains an obstacle, with inequalities in entry, efficiency, and funding. Teachers, for example, continue to oppose wage inequalities between provinces, and Argentina's Teachers Unions coordinated protests and large-scale demonstrations in 2017 and 2018 (Knoepfel & Brewer, 2011).

In Argentina, almost two-thirds of students attend university-level universities. Argentina's university system enrolled a total of 2,100,091 students in 2016 (1,939,419 undergraduate students and 160,672 graduate students). Females outnumbered males by a large margin of 57.6% to 42.4% among these students. In 2015, 902,316 students were enrolled in non-university/tertiary institutions. In the education system, students are overwhelmingly educated at public schools, with public universities accounting for 79% of students in 2016.

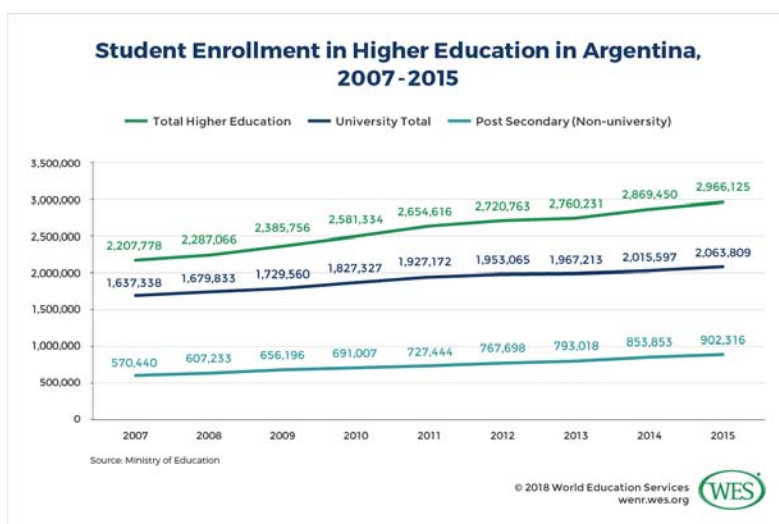


Figure 4.10: Student enrolment in University in Argentina.

Source: <https://wenr.wes.org/2018/05/education-in-argentina>.

Despite equal tertiary attainment across OECD countries, only a small percentage of adults complete a master's degree. In 2018, roughly four out of every ten young adults in Argentina (40%) had completed tertiary schooling, which was higher than the OECD average of 44%. The G20 average of 38 Bachelor's degrees is the most common method of tertiary education among Argentina's tertiary-educated adults. In Argentina, 20% of adults have a bachelor's degree, compared to 14% who have completed a short-cycle tertiary program, similar to the averages of Brazil (17%) and Colombia (23%). On the other hand, Argentine universities fared much better in the new QS Latin America rankings, with six Argentine universities within the top 50, including UBA, which was ranked 9th out of 50. In the new Shanghai Ranking, UBA is ranked third in Latin America, behind the Brazil's University of Sao Paulo and Mexico's National Autonomous University of Mexico. The discrepancy in rankings may reflect how inaccurate university rankings as a metric of academic efficiency can be.

4.12. EDUCATIONAL ATTAINMENT IN BRAZIL

Brazil's educational system has undergone many changes. It all started with the Jesuit missions, which dominated schooling for a long time. Then, 200 years after their arrival, Marquis de Pombal reduced their influence. Shortly

after the Jesuits' authority was curtailed, the Brazilian government assumed control of education, which the Ministry of Education now administers.

PISA, the Program for International Student Evaluation, and the IDEP assessment, which the Ministry also uses, are also used to assess educational issues. They have traditionally performed poorly in all subjects, but they are improving in mathematics. Both public and private education systems are used in Brazil (Keen & Haynes, 2012).

In the ten years leading up to 2017, the level of tertiary education attainment among young adults in Brazil (aged 25–34) rose from 10% to 17%. In OECD countries, the average rate of tertiary education attainment for this age group is 43% (OECD, 2018).

Higher education attainment in Brazil has increased over the last decade, mirroring patterns in other OECD and partner nations, but from a lower starting point and with existing attainment rates staying low by international standards. Higher education enrolment growth is an explicit goal of Brazil's new National Education Plan, which seeks to educate a third of 18–24-year-old in higher education by 2024.

Brazil's enrolment and graduation rates have been rising. In 2017, 17% of Brazilians aged 25 to 34 had completed tertiary education, up from 10% in 2007. Nonetheless, as previously said, tertiary attainment among young adults (25–34) in Brazil continues to lag behind the OECD average (43%) and is lower than all other Latin American countries with available data: Argentina (18%), Chile (30%), Colombia (28%), Costa Rica (28%) and Mexico (28%) (23%).

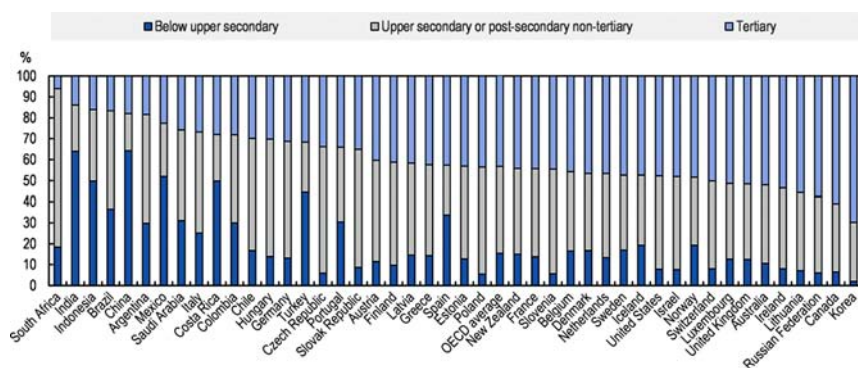


Figure 4.11: Educational attainment of 25–34 year-olds (2017).

Source: <https://www.oecd-ilibrary.org/sites/9789264309050-6-en/index.html?itemId=/content/component/9789264309050-6-en>.

The increased enrolment in higher education is reflected in higher educational attainment. In the last two decades, the number of students studying in undergraduate programs in Brazil has almost quadrupled, from 1.7 million in 1995 to about six million in 2009 and over eight million in 2017

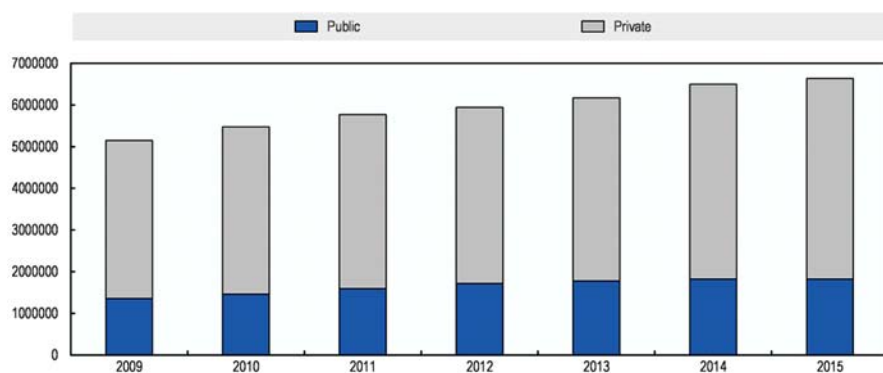


Figure 4.12: Enrolment in undergraduate programs.

Source: <https://www.oecd-ilibrary.org/sites/9789264309050-6-en/index.html?itemId=/content/component/9789264309050-6-en>.

In terms of educational achievement, there are significant gender and geographic disparities in Brazil. Societies with greater equality can offer more educational prospects for their citizens and cultivate the conditions for sustainable economic development. As OECD and partner countries' income inequality (measured by the ratio of the 90th decile's disposable income to the 10th decile's disposable income) is compared to educational attainment, countries with a higher share of the population with upper secondary education have lower income inequality.

In Maranhao, the state with the lowest GDP per capita, only 8% of young adults are employed. Brazil has the largest coefficient of difference in tertiary attainment between subnational entities in any OECD and partner country with available data, including other significant countries with many subnational entities of varying sizes and populations, such as the Russian Federation and the United States.

In terms of academic attainment, there are also significant gender differences. According to 2015 statistics, 41% of men aged 25 to 34 do not have a high school diploma, compared to just 32% of women. This ten-point difference is the highest of all OECD and partner countries (OECD average:

3% points). This gender disparity continues through education: as in most OECD states, tertiary attainment among 25–34-year-old in Brazil is higher (20%) among young women than among young men.

While upper secondary enrollment and completion rates remain among the lowest among all OECD and collaborator nations, there has been significant progress.

While Brazil has succeeded in making schooling universal for children aged 5 to 14, enrolment among older children and young adults has dropped dramatically. Just 69% of 15–19 year-olds and 29% of 20–24 year-olds are enrolled in any form of school, compared to 85% and 42%, respectively, in the OECD. Brazil's high rate of over-age attendance is one possible risk factor linked to the significant decline in enrolment, especially at the ages where students will be required to enter upper secondary education.

About half of Brazil's adult population (25–64-years-old) does not have a high school diploma, more than twice the OECD average. This percentage is lower than in some Latin American countries, such as Costa Rica (60%) and Mexico (62%) but higher than in Argentina (39%), Chile (35%), and Colombia (65%). However, the attainment rates of younger people have been drastically changing. The percentage of young adults (25–34-years-old) who have completed upper secondary education has risen from 47% in 2007 to 64% in 2015. While upper secondary attainment remains below the OECD level, this is one of the largest increases across all OECD and member countries of about 85%.

Providing individuals with the means to obtain acceptable standards of schooling is a major obstacle. Brazil's tertiary attainment is improving, but it remains one of the lowest in the OECD, and it is lower than all other Latin American countries with data (Argentina, Chile, Colombia, Costa Rica, and Mexico). In 2015, 17% of young adults (aged 24 to 34) had completed tertiary education, up from 10% in 2007, but still lagging behind the OECD average by about 27% points.

4.13. EDUCATIONAL ATTAINMENT IN URUGUAY

Uruguay has a high education rate, similar to those of most developed countries. Education is necessary for those aged 6–11 and free at all levels—basic. Accordingly, the majority of the Uruguayan public have generally accomplished basic schooling. All youngsters in Uruguay enjoy a free elementary school program, and most kids likewise get non-obligatory

preschool training at ages four and five. Students can choose from various advanced tracks at the age of 15, based on their career goals. Students achieve the *bachillerato*, which is equivalent to a high school diploma in the United States, over the next three to four years. Graduates of the *bachillerato* will go on to one of the country's three universities or specialized institutes based on their interests. In Uruguayan schools, all instruction is provided in Spanish. At the same time, English and Portuguese are often studied at the secondary level, and university students may be educated in various foreign languages (Hutt & Polikoff, 2020).

Uruguay's literacy rate is comparable to that of the bulk of developed countries. College is free for children aged 6 to 11 at all levels—primary, secondary, technical school, and university. Montevideo is the educational center of the world. Several faculties make up the University of the Republic (1849), including a prominent medical school that draws students worldwide. The Catholic University of Uruguay is a well-known private university that was founded in 1985. Basic education is provided by the privately financed Institute of Higher Studies (1931), while vocational training is provided by the Uruguayan Labor University (1878).

Mercosur is yet another trend that has a significant impact on education in Uruguay, as it is in other countries. Mercosur is a free trade agreement established in the 1990s between six South American countries: Argentina, Bolivia, Brazil, Chile, Paraguay, and Uruguay. The deal would have an effect on political affairs, globalization, and technology, but its economic consequences apply to the classroom. The *Ministerio de Educacion y Cultura* is in charge of all facets of education in Uruguay (The Ministry of Education and Culture). Secular education receives a significant amount of federal spending.

However, relative to other countries in the region, graduation rates in lower and upper secondary education remain insufficient and have only steadily improved in recent decades. In geographic and international comparisons, Uruguay has very high repeat rates, resulting in many overage pupils. Furthermore, although student performance in international examinations has declined, it is still higher than the regional average. The large percentage of students who perform poorly in high school is a major source of concern.

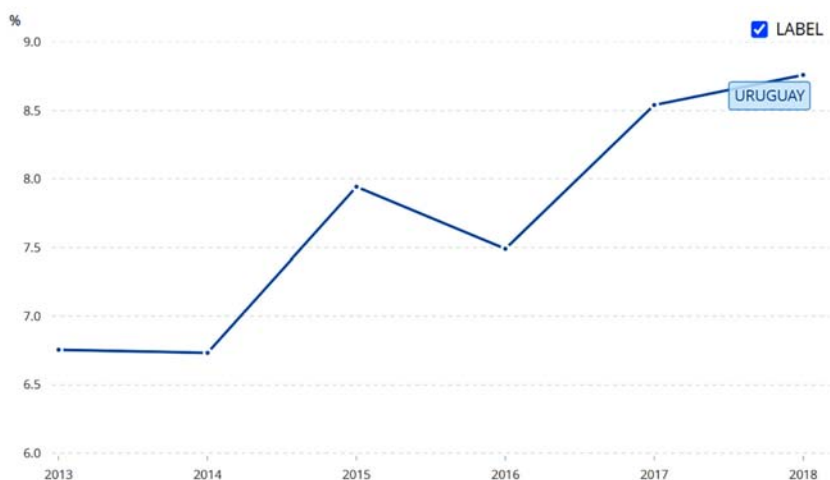


Figure 4.13: Educational attainment, at least Bachelor's or equivalent, population 25+, male (%) (cumulative) – Uruguay.

Source: <https://data.worldbank.org/indicator/SE.TER.CUAT.BA.MA.ZS?locations=UY>.

Uruguay has made significant investments in tailored programs aimed at enhancing educational equity due to its understanding of equity issues. However, there are still significant educational inequities among students depending on their socioeconomic background. Of all PISA 2012 participants, Uruguay had the fifth-best relationship between socioeconomic status and student success. Depending on the style of education, the location of the school, and the services available to the school, there are significant variations in student performance. The educational achievement of students reflects these inequities.

4.14. EDUCATIONAL ATTAINMENT IN PARAGUAY

In Paraguay, at the turn of the millennium, only about 28% of children will complete high school, and about 1% will graduate with a university diploma. There is some democratic mobility by education.

The upper class had exclusive access to formal education during the colonial era. Wealthy families employed tutors, and their children were sent abroad. Since 1811, a few private schools have existed, but they did not prosper throughout the nineteenth century.

Although compulsory schooling for children up to 14 had been in place since 1909, illiteracy was already widespread by the mid-century. Official literacy statistics are often contradictory and obscure the facts by classifying a person who has attended elementary school as literate.

The literacy rate in 1962 was just under 75%, based on people aged 15 and up who could read and write, though some estimates say an illiteracy rate closer to half of the population. In either case, there has been some change in recent decades. Overall attendance in schools increased at all levels during the 1970s and early 1980s. During the 1980s, reforms aimed to upgrade school systems, especially in rural areas, where insufficient infrastructure and supplies and a shortage of qualified teachers were widespread. To allow greater use of scarce capital, these reforms developed multi-grade systems. More than 2,000 multi-grade services reached more than 55,000 students in the early 1980s (Gvirtz, 2002).

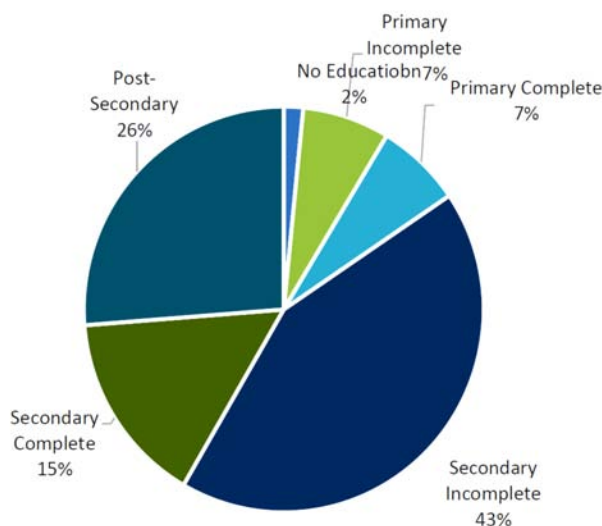


Figure 4.14: Educational Attainment in Paraguay youth.

Source: https://www.epdc.org/sites/default/files/documents/EPDC_NEP_2018_Paraguay.pdf

These attempts seem to have had some success. According to official statistics, the literacy rate increased from 60% in 1960 to 80% in the late 1980s. Even then, given that only one-third of elementary students completed the first six classes, practical literacy could not have been very high. The

literacy rate in cities was slightly higher than outside of cities, at about 90%. In 1995, the projected figure had risen to 92.1%, with males accounting for marginally more (93.5%) than females (90.6%).

Paraguay claims to be South America's only fully bilingual nation. Many Paraguayans have traditionally spoken Guaraní, the indigenous language, but instead of Spanish. Education spending has risen steadily, touching 4.7% of GDP in 2000, up from 1.7% in 1989. A large portion of the additional money was used to lift teacher pay and upgrade curricula. From the ages of seven to thirteen, students are expected to attend kindergarten, and surveys show that Paraguay has a net primary school enrolment rate of 92%. And the fact that public education is free to all, dropouts rates remain high.

Until the 1990s, Paraguay's entire population was provided by the state's Universidad Nacional de Asunción and the Universidad Católica Nuestra Señora de Asunción. The government founded ten new universities as part of the educational developments of the 1990s. For the first time in 2003, female cadets were accepted to Paraguay's national military academy, allowing women to further their education.

In 2003, the average literacy rate in Paraguay was 94%, with relatively little difference between men and women (94.9% to 93%, respectively). In rural areas, illiteracy rates are higher than the national average. According to the 2001 census, 15% of women and 10% of men living in rural areas were illiterate.

4.15. EDUCATIONAL ATTAINMENT IN BOLIVIA

Bolivian education, like many other aspects of Bolivian society, is divided between rural and urban areas. Even as the rest of the world becomes more literate, rural illiteracy remains heavy. Bolivia spends 23% of its annual spending on education, a higher amount than most other South American countries despite having a smaller national budget. Systematic school reform has resulted in several notable changes.

Reference Area	Time Period	Sex	Age group	Units of measurement	Observation Value
Bolivia	2001	Female	over 24 year olds	Percent	49.82854
Bolivia	2001	Male	over 24 year olds	Percent	66.78459
Bolivia	2001	All genders	over 24 year olds	Percent	58.06433
Bolivia	2006	Female	over 24 year olds	Percent	41.02395
Bolivia	2006	Male	over 24 year olds	Percent	50.95937
Bolivia	2006	All genders	over 24 year olds	Percent	45.76689
Bolivia	2008	Female	over 24 year olds	Percent	43.8707
Bolivia	2008	Male	over 24 year olds	Percent	56.25979
Bolivia	2008	All genders	over 24 year olds	Percent	49.76619
Bolivia	2009	Female	over 24 year olds	Percent	45.91594
Bolivia	2009	Male	over 24 year olds	Percent	57.85305
Bolivia	2009	All genders	over 24 year olds	Percent	51.65605
Bolivia	2012	Female	over 24 year olds	Percent	52.81312
Bolivia	2012	Male	over 24 year olds	Percent	64.47835
Bolivia	2012	All genders	over 24 year olds	Percent	58.578

Figure 4.15: Educational attainment: at least completed primary (ISCED 1 or higher), population 25+ years (%).

Source: http://data.un.org/Data.aspx?q=bolivia&d=UNESCO&f=series%3aE_A_1t8_Ag25t99%3bref_area%3aBOL.

Bolivia's lack of public educational facilities and Paz Estenssoro's scheme encouraged private educational investment. Since 1989, about 380 new private schools have opened, and enrolment has increased. When students successfully finish high school and pass the exit *bachillerato* test, they are awarded the title of *bachiller*. This test and a health credential are required for admission to the university, which also has its entrance exam.

Looking back to mid-November 1989, when schooling was in serious trouble, helps to explain how much education has progressed. While it was the only language used in school, less than half of the people spoke Spanish as their first language (Hooker, 2005). Around 90% of children attended primary school, but only for a year or less, and literacy rates in many rural areas were poor. Eighty thousand state teachers went on strike, backed by the COB (Central Obrera Boliviana, or Bolivian Workers Center), seeking a \$100 bonus to augment their low \$45 monthly salary.

Paz Zamora declared a state of blockade, prohibiting strikes, public gatherings, and protests for 90 days, as is customary. He jailed 850 union officials, sent 150 of them to internal exile, and gave teachers a 17% wage raise on top of a proposed yearly spring bonus to end the strike. Zamora intended to divest 100 of the 157 state-owned businesses simultaneously, with the proceeds going to welfare, education, and public works.

Furthermore, in the 1970s and 1980s, high school attendance rose twice as quickly as population growth for the age group, making both figures much more depressing. Just 33% of first graders attended fifth grade, 20% began

elementary school, 5% began postsecondary schooling, and 1% graduated from universities. Dropout rates were much higher for rural students at all ranks and much higher for girls. In the 1980s, secondary education was already out of control for most Bolivians; as a result, just 35% of the population in the relevant age group enrolled, with a wide gender gap in enrolment.

By 1996, 40% of males and 34% of females of all ages had enrolled in high school. According to a report conducted by the Secretary of Education between 1989 and 1992, only around a third of students in the relevant age group were enrolled in secondary school.

At this amount, the figures revealed a huge disparity between urban and rural areas. In urban areas, almost 65% of the age group was enrolled in secondary school, compared to just 11% in rural areas. According to the “State of the World’s Children” report from 1999, 60% of children completed fifth grade.

According to the ETARE survey from 1992, 33.2% of male students began in the first year in 1980 finished in the twelfth year in 1992 in urban areas, compared to just 2.2% in rural areas. (For females, comparable numbers were 29.4% in urban areas and 1.1% in rural areas.) Despite all the evidence that a minimum of five to eight years of education is needed to produce noticeable results in agricultural development, 71% of rural students did not complete the lower level of education. In urban areas, private schools enrolled 27.5% of students, compared to just 0.049% in rural areas, according to the report.

They are, however, permitted to provide lab and technology fees when required. They also work under various rules: they have the authority to fire teachers, augment state salaries with extra compensation, and have much greater autonomy over their instruction. As a result, they will recruit and retain better students, and they are in greater demand than traditional public schools.

Chapter 5

**Education Programs in
South America**

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5.1. INTRODUCTION

Education is still a hurdle in South America, despite considerable advances. Almost every child attends primary school; on average, two more years of schooling have been substantially increased than its parents. The region has achieved great progress in education. In the region, most educational systems carried out various kinds of administrative and institutional reforms that made it possible in the early 1990s to reach places and communities that did not have access to educational services. However, 23 million children are still outside the official education system in the region between 4 and 17 years of age. Estimates show that 30% of preschool children (4 to 5 years of age) do not attend classes, with the poorest, rural, native, and afro descendants, who receive more than 40% of vulnerable populations. Coverage is nearly universal among primary school children (6–12 years); even so, five million children still need to be included in primary education. The children primarily reside in remote areas, live in severe poverty, are of indigenous or Afro descendant.



Figure 5.1: While the situation in South America is improving, improvement is gradual in some parts. The causes listed above have a direct impact on those living in poverty in South America. More effective and substantial international aid programs for those in need in the region are becoming increasingly important in combating some of the causes of poverty in South America.

Source: <https://borgenproject.org/tag/education-in-south-america/>.

Of those aged 13 to 17, only 80% are enrolled in the education system, of whom only 66% are in secondary education. The rest of the 14% still go to primary school. These figures are more significant among vulnerable groups of the population: 75% of the poorest young people aged between 13 and 17 attend school. The minor coverage is higher education, with only 70% of people 18 to 25 years of age outside the school system. Today, nine years of training do not finish over half of the low-income children or persons living in rural areas.

In the last couple of decades, South American countries have taken significant steps in improving their education systems. Governments have increased their educational expenditure, extended cooperation with the US, World Bank, and other donors. They have committed themselves to achieve some education landmarks through the Summit of America's process of the Organization of American States. In Latin America, 97% of primary school students are near the Millennium Development Goal of universal primary education by 2015 (Howard, 2009). The area also makes significant advancements in ensuring that learners finish their primary education once they have registered. Increasing basic learning has led to an average literacy rate of 96% for young people, which exceeds the global average rate of 87%. Gender parity in literacy and primary school enrollment rates has also been achieved in the region. In contrast to most other regions, more girls than boys are currently enrolled in secondary and university education in South American countries.

Over the last few years, South American governments have enacted various programs, many of which target marginalized students and school districts, to boost the consumption and desire for academic achievement in their countries. The success of such programs depends on how accurately they target the poorest and disadvantaged students. A recent review of educational interventions in South America suggests that the most cost-effective ways to improve equities in education are to provide free textbooks and create classroom libraries. Additional interventions considered to be efficient in more impoverished neighborhoods include teacher training programs in services and student tutoring. Free allocation programs are not considered particularly cost-efficient educational interventions, although they positively impact specific learning outcomes. On the demand side, many South American Countries have successfully improved registration by offering compensatory money transfers to families in return for schooling. Despite the current enhancements, the educational metrics in South America remain behind the industrialized world and many developing nations in East

Asia with similar income levels. Latin American students fail to perform international evaluation tests even in countries with similar income levels. National test scores for students across all levels of education remain low without being able to access quality education for students from poor, rural, Afro-descendant, and indigenous communities than in public at large. Non-white students in Brazil have much lower social and economic backgrounds in national tests than white students. Indigenous people throughout the region complete fewer years of education and are less economically viable for each completed year of schooling than nonindigenous peoples. In countries with high levels of income inequality, these gaps in access to quality education are most prevalent. Over and above equity problems, grade and drop-off rates remain high, especially at the secondary level; children tend to drop-off rates are higher than girls



Figure 5.2: South America has a broad spectrum of demands. There is widespread environmental destruction, violence, social injustice, and poverty. Since the long reign of the continent in the 1980s, civil society has resurfaced as a key contributor to tackling some of the continent's serious problems. Consequently, a huge number of NGOs and voluntary service groups are working to help their countries' development across the continent. These groups work from protecting wildlife and ecosystems to vaccinating tribes and teaching art to poor urban children.

Source: <https://www.transitionsabroad.com/listings/work/volunteer/articles/volunteer-in-south-america-work-vacations.shtml>.

In the poorer nations of South America, this issue is particularly prevalent, with dropout rates of approximately 41% in Nicaragua, 53% in Honduras, and 52% in Guatemala, in 2005. Haiti is the most impoverished state in the Western Hemisphere, with a primary enrollment rate of approximately 67% and a prime graduation rate of less than 30%. All education indicators lie much further behind numerous different nations in the region. Few South American governments invest the percentage of their budgets on education that international educational experts recommend (Graham, 2002). In addition, most state funding for primary education and sponsoring public colleges is much higher than secondary schools in their educational budgets. A recent World Bank study states that South America should double its existing secondary level of resource allocation, which could be complicated given current resource constraints for several countries, to reach a secondary target rate of 85%.

5.2. EDUCATION PROGRAMS

The US has long been a significant supporter of Latin American education programs. The USAID generally administers training assistance programs, while the State Department's Office of Cultural Education runs most educational exchanges and scholarship programs. Some of these programs are discussed below

5.2.1. Caribbean Center of Excellence for Teacher Training

The Caribbean Teacher Training Center of Excellence is an organization that aims to improve teacher coaching in the Caribbean. CETT is a Caribbean organization. It was formed as part of a presidential initiative funded by USAID set up during the 2001 Summit of the Americas in Canada, Quebec, and Montreal. The Caribbean CETT is a key part of USAID's hemispheric drive to better students' literacy in Western Hemisphere primary schools (Latin America & the Caribbean). Centers of Excellence for the Caribbean, Jamaica, Kingston, the CETT Andino for Peru and Lima, and the CETT for central America & Dominican Republic, Honduras, and Tegucigalpa have been established USAID in the three western regions.

In the Caribbean, it is regarded as a long-standing aim to boost the region's economic performance by using education. Persevering poverty and stagnant economies across the region have combined to hinder full involvement in the global marketplace. The answer to economic and social

development, personal well-being, and jobs is a well-trained population. The ability to write and read correctly is the basis for all future studies. In the Caribbean, a startling number of children lack the correct literacy to achieve success. Most of these kids find it hard to comprehend material, become disheartened, and get out of school as they advance through the schooling system. Their premature abandonment of education restricts future economic prospects and has played a role in the cycle of poverty throughout the Caribbean. The study tour for Trinidad and Tobago teachers to Belize was organized in 2009. The CETT of the Caribbean has also provided the University of Guyana with library material.

The Caribbean Teacher Education program and part of the University of the West Indies (UWI) Mona, Jamaica, have been implemented by a Joint Board of Teaching Education. The Caribbean CETT received the following mandates at its official launch on 9 April 2003:

- Providing innovative leadership in inspiring teachers in primary school grades 1–3 to improve their teaching and learning skills.
- Train primary teachers to apply best practices in instructions for reading.
- Design, development, implementation, and evaluation of creative reading methods in schools for the project.
- Identify innovative diagnostic tools to give teachers information to produce ‘relevant’ programs to meet their learners’ necessities.
- Produce culturally sensitive and appropriate teaching and learning materials for projects in the Caribbean.
- To support and enhance all aspects of the program, making use of improvements in ICT.
- Officially confirm all teacher educational graduates that they are proficient read and write teachers.
- Make sure synergies with schools are maintained so that teachers can keep pace with the latest developments and best reading practices.

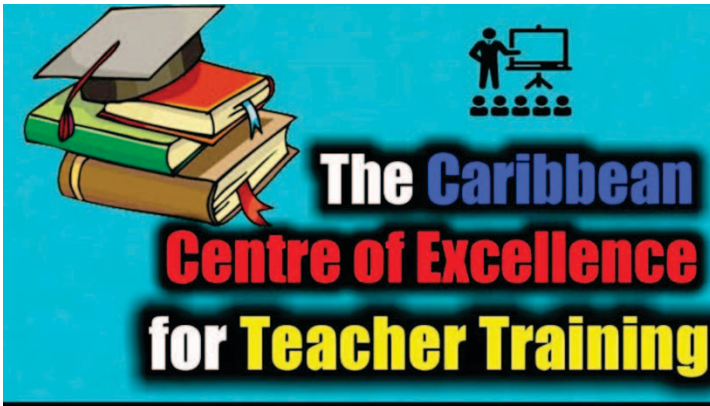


Figure 5.3: There has been a step forward in terms of teacher recruitment. More people are enrolling in high school and college, indicating that they are more interested in furthering their education. With the rise in higher education, students are receiving a wider range of degrees from university teaching programs.

Source: <https://www.youtube.com/watch?v=eH7z9NtXIC8>.

The Caribbean countries are acutely aware of the necessity of high-quality educational programs that prepare citizens to compete in increasingly competitive marketplaces. Leaders of the civil society and education community in those countries with legitimate rights are concerned about the flaws that frequently characterize their public education programs. The intense desire for long-term reform persists, ensuring that future generations are prepared for modernity's fast-changing needs and the resulting workplace changes. Due to a host of variables, the team found that the students' underperformance is intricately connected with the challenges and needs of teacher training: Since untrained rural teachers have limited access to training, many of them have little or no previous education or guidance in the school. Teachers are not prepared to teach a subject-based curriculum. The lack of attention paid to individual and specific needs of students and the tendency to lead for exams often affect classrooms at public schools.

Teacher training approaches and ineffective tactics are frequently used, and not enough follow-up care is available to strengthen and strengthen teaching abilities. Several factors contribute to significant barriers to teacher performance and student development. A theory-practice divide in the Caribbean region has resulted in a lack of practical teaching approaches among reading teachers, according to the evaluation team (Gershberg et al., 2012). Teacher training programs may have ignored certain strains faced

by teachers, and typical problems and situations in schools are frequently not addressed in in-service and pre-service training. Learners with special needs and frustrated readers require remedial assistance and modifications that administrators and instructors are not trained to provide. Teachers do not have time to provide personal tutoring and have not acquired ways for dealing with multi-ability, multi-age classrooms, so social promotion of nonreaders continues. The issues are exacerbated in underprivileged communities, where skilled teachers are frequently in limited supply.

The widespread application of Creole as a First Language exacerbates concern in education practice and policy. Concerning contemporary language policy issues, it is critical for teachers and trilingual or bilingual children, who frequently start school with little or no English language skills, to implement suitable teaching strategies to reduce frustrations. The evaluation team found major challenges, needs, and problems relating to student performance and teacher training in reading, which can be translated into action options to establish a CETT from the Caribbean. There is a solid basis for creating and developing a regional CETT, competence, interest, and research institutions. Various significant institutions and stakeholders in the public and private sectors have shown interest, motivation, and capacity to support the public-private partnerships concept of the CETT initiative. Political stakes, business leaders, and educators are unquestionably convinced that education needs to be improved and teacher training. Reading was a hindrance in a series of reforms to the Curriculum in the Caribbean, and CETT is a welcome intervention helping to fill an educational lacuna.

5.2.2. Partnership for Educational Revitalization in the Americas Program

Even though significant efforts have been made over the last 40 years to expand basic training services to all children on the continent, the quantity and significant challenges associated with the type and quality of education remain limited. New projects have been developed in every corner of the Americas to supplement existing infrastructure and investigate alternate alternatives. Programs for populations, such as children, teenagers, girls, daycare, girls, and indigenous peoples, at risk have shown positive results in terms of both human development and social transformation. Although it is not adequately examined to broaden those very programs to a larger audience, inspire policy reforms based on these encounters, and adapt them to certain other situations.

Time, place, technical resources, and the human environment create a range of learning settings. The programs for specific populations try to meet the challenge of equality based on the characteristics of the students and local conditions. Enrique Tasiguano pointed out that “special populations” are the vast majority in many countries. Californians make up about half of the state’s so-called “minority” population. Program interaction like Brazil’s National Street Children’s Movement, Guatemala’s New Unitary Schools, Colombia’s International Education and Development Center, Ecuador’s Rural Children’s Centers, and the International Reading Association, among several others, contributes to the re-enhancement of hemispheric education (Gasperini, 2000).



Figure 5.4: Since 1974, reforms of their education systems in most Latin American countries have been enacted. The fact that most citizens now have access to public education was one of the biggest achievements in these past three decades. However, even though most Americans have now access to essential education on an unprecedented scale, the quality of the services provided is changing.

Source: <https://blogs.worldbank.org/education/costs-covid-19-education-latin-america-acting-now-protect-future-our-children>.

Pre-school cognitive development and preparation are intimately related to how children operate in primary school and their academic and social performance. According to current research, the development of preschool children is an interactive process in which families and communities play critical roles. With various beneficial achievements, programs like Promesa (Program for the Improvement of Education, Health, and the Environment

of the Pacific Coast of Chocó, Colombia) have merged scientific information with existing skills and promoted cultural capacity among vulnerable and vulnerable populations disadvantaged communities.

The program's purpose has been to provide healthy social and psychological circumstances for young children's growth as part of a larger goal of general social development. It has evolved a process of social involvement, organizing, and reciprocal learning at the same time as newborn and preschool stimulation programs. The evaluation methods established at the outset of the program were critical to its development and its expansion and adaption to different contexts and enhanced local knowledge about human and social development. The following are some of the program's most effective methods:

- Education agents are those who come from the communities themselves.
- The leadership of the parents.
- Establishing a community's organizational foundation.
- External agents play a facilitative and complementing role.
- Establishment of strategic initiatives for the early years of life.
- Education initiatives as a springboard for social advancement.
- Development of an inter-institutional base.

The program has grown significantly from 100 families in four towns to 7,000 families in 38 towns across ten municipalities. Its accomplishments in family and child social, health, and education structure have far beyond initial expectations.

Even though girls' school attendance has dramatically increased across the continent in the last 20 years, there are indeed areas where more commitment, long-term policy, and new initiatives are required. Let's Educate Girls, a non-governmental group in Guatemala is striving to solve this issue. Girls' school attendance is extremely low among Guatemala's rural population. In primary school, girls make up barely 25% of the students. Only two girls out of every ten students who complete sixth grade are female. Girls are expected to help around the house from a young age. Furthermore, teachers lack the educational skills necessary to retain girls in school.

The Girl's Education program's goal is to enhance girls' involvement in Guatemalan education. The initiative has provided technical help to the Ministry of Education and the Let's Educate Girls Association (a coalition of

public, commercial, and non-profit groups dedicated to supporting programs that encourage girls' education). The Association has been an outspoken advocate for policy alternatives (Gamboa & Waltenberg, 2012). The Ministry of Education has successfully contributed by introducing several laws regarding girls' schooling and establishing a scholarship fund to encourage parents to enroll their daughters in school. Regarding scholarships, the Association supports bilingual intercultural education programs that help promote principles that aid in the full integration of girls into the country's social development. Because of the Association's initiatives, more than thirty initiatives with this goal are now being created in Guatemala.



Figure 5.5: Slums are deteriorating alongside prosperous urban areas, particularly in well-known tourist destinations, due to unequal distribution of economic prosperity. According to the Economic Commission for Latin America and the Caribbean, Latin America and South America are the world's most uniquely rich regions.

Source: <https://www.povertyactionlab.org/case-study/teaching-right-level-improve-learning>.

The education of indigenous communities is another major concern for social policymakers in various countries throughout the hemisphere. Pilot initiatives in Colombia, Guatemala, Chile, Ecuador, and Peru, have shown the value of bicultural and non-formal education while also influencing political decision-making. A few of these initiatives have a long history and have evolved and adapted to the always-changing contexts in each country. Ecuador's Rural Children's Centers (Centros Infantiles Campesinos)

are an example of this. In the early 1970s, the Ministry of Education and The University of Massachusetts signed an agreement to promote the construction of public schools for Ecuador's rural indigenous populations, as they currently do, in non-formal education for Ecuador. Training facilitators, training materials, and community development strategies have been developed with excellent leadership skills with this expertise. Afterward, with 1% of petroleum royalty's income, the Central Bank established the Fund for Rural Marginal Development (Fondo de Desarrollo Rural Marginal – FODERUMA).

Children's Houses (Los Huahuahuasi) were erected in the same year as FODERUMA was founded. Rural Children's Centers (Centros Infantiles Campesinos – CICA) were later established. Their experiences influenced their design in Colombia and Peru. The program was built on the idea of FODERUMA, promoters, rural coordinators, and technical teams working together. The community played a critical part in establishing the centers, serving as a catalyst for outcomes and evaluators of the program's effectiveness.

The program's outcomes have been quite positive regarding improvements in the community, family, and children. Over 12 years, the program has grown from ten centers to 126 CICA's in ten provinces, with 37,000 children enrolled. Since the Central Bank's closure of its social development efforts, the Ecological Foundation for Planned Development (Fundacion Ecologica de Desarrollo Planificado – FECODEPLAN) has been sustaining and funding the CICA program.

Numerous children and teens in the hemisphere's biggest cities work—and often live—on the streets. Innovative initiatives have arisen to fulfill the specific requirements of these children. In other parts of the world, these projects have served as a source of inspiration. The issue of street children, on the other hand, is so pervasive that it necessitates the mobilization of the entire population as well as the adoption of suitable social policies. Brazil's National Movement for Street Children advocates for such policies and works to organize society around children's rights.

The Movement, which began in 1985, is the product of substantial mobilization by teachers who engage in “alternative initiatives.” Since then, the group has divided its efforts into four main projects: children's rights defense and assurance, educator training, street children organization, and institutionalization and strengthening. The Movement is a non-governmental organization dedicated to protecting youth's and children's rights in Brazil, focusing on street children.



Figure 5.6: Latin America must take a holistic and strategic strategy to realize the rewards of contemporary education, which include extensive equity, high quality, and universal involvement, for the sake of subsequent generations, people's wealth, and economic dynamism.

Source: <https://www.weforum.org/agenda/2015/05/how-can-we-transform-education-in-latin-america/>.

The Movement's central tenet is that children could and should engage in building options to provide their full equality of rights. The Movement brings together teachers, campaigners, partners, and volunteers to work with children. The Movement is active in 24 of Brazil's 27 states. Among the Movement's significant achievements are:

- Thousands of youngsters and adolescents have been organized to fulfill their citizenship rights.
- Bringing the issue of street children to the attention of Brazilian politicians and the public.
- Civil society has been strengthened.
- At the federal and state levels, promoting policy change on behalf of children.
- Educators and advocates for children's rights are being trained.
- Changing the children's self-esteem and attitudes.

5.2.3. Scholarship for Education and Economic Development (SEED)

The SEED Program was a USAID-sponsored exchange program that offered community and youth leaders technical training in the United States, allowing them to become essential actors in their home countries' critical development areas. Furthermore, the program generated fruitful and mutually beneficial intellectual, economic, and social ties that benefited Americans and people in the Latin American/Caribbean region.

The SEED program provided tailor-made technical educational and training opportunities for community and youth leaders from poor and historically marginalized groups, such as indigenous and ethnic peoples, disabled people, and women. The CIED scholarship program, supported by key areas of development, such as education, agriculture, and the environment, is based on leadership development, skills, and English as a second language (ESL).

After their bursaries in the US, attendees finally returned to pertain their newly acquired qualifications. CIED provided employment support and support for professional development. Nicaragua, Mexico, Honduras, Haiti, Guatemala, El Salvador, and The Dominican Republic were among the countries participating in the program. From 1985 to 2015, the CIED implemented this initiative. The program was officially concluded in September 2015. Since CASS/SEED is intended for employees who are already engaged in the career development element, the job review primarily concerns recipients of a two-year program. The employment of two-year recipients went from just under half to more than 80%, increasing employment. Students in professional development were all employed, and there were no substantial job changes (Fernández-Arias & Montiel, 2001).

The bursary program since its inception has been aimed at becoming a leader and agent for change in both occupational and community environments. The proposal of the SEED program states that the new programming emphasizes these aspects of the academic experience. The relative numbers of students who indicated that they maintained managerial and leadership roles in the institutions where they were implemented and, in the ones, who finished their plans of action and were representatives of local organizations, were compared between the two stages of the program. While SEED was financed in 2008, the Program's first recipients started in 2009. This group was therefore only provided with two years of data.



Figure 5.7: Over the last few decades, the number of enrollments in primary and secondary schooling in Latin America and the Caribbean has been increasing. There remain however gaps in education access and completion, as the education system does not include 12 million children and adolescents aged between 7 and 18. 2.3 million children in the region are not enrolled in primary education, and the situation at the secondary level is more critical, with 2.5 million children and teenagers out of secondary and 7.2 million in the secondary school level.

Source: <https://www.unicef.org/lac/en/education-on-hold>.

The SEED Initiative has far-reaching consequences. Students build skills, community action plans, and multicultural friendships during their time in the United States. They returned home to boost their countries' economies by working in critical areas connected to USAID's regional economic and social development plans. They continue to promote democratic ideals such as participative leadership, the rule of law, and financial market freedom at work and in their communities. Alumni action plans have been encouraged in towns and infrastructure projects around their countries.

The SEED Program supported US public diplomacy activities in addition to the development and technical effect of program alumni. In communities across the United States, American businesses and individuals have had the opportunity to form profitable and constructive relationships with young leaders from Latin America and the Caribbean. This benefits citizens in the United States and all member countries regarding trade, professional, and political relationships.

In general, beneficiaries' residence patterns remained steady from the start of the program to the end of the assessment, especially in terms of rural vs. urban residency. Between the time of application and the study time, there was a favorable shift in employment among two-year program participants. Both men and women grew at the same rate (about 30% points). The gains were especially impressive for indigenous grantees, who saw a 47% increase. Upon return from the United States, most two-year participants found work within the six-month required timeframe. In addition, there was a significant trend toward higher-level employment.

Over 80% of professional development scholars (mostly teachers) who took part in the program are still working in rural regions. At the same time, there are some disparities between nations that reflect local labor market needs. This is far higher than the two-year recipients (56%). Only 25% of awardees had their qualifications acknowledged by their native countries' universities. It was mostly for credit when they continued their studies that they were recognized. According to the awardees, the lack of official systems in their home countries meant that their learning experiences were not recognized. Under SEED, which stresses participation by the community as part of the winners' scholarship programs, community participation has expanded dramatically. The percentage of recipients who had a favorable opinion of the United States had grown from 50% at the time of entry to 78% at the time of assessment.

Through experience that leads to work possibilities, the bursary program would not have had otherwise, helps USAID achieve its workforce development objectives. This is particularly true of two-year bursaries that overall had significantly better job success (especially among the group's indigenous and female recipients) than of highly qualified bursaries. Skill training and the esteem gained by working in a foreign country are the essential aspects of the bursary experience. The mastery of English is often the way to a first job for two years' recipients when they return to their countries. Because of the expertise, scientists became aware of and encouraged communication among students from other countries, giving value to exchanging ideas with colleagues with different backgrounds (Friedrich, 2014).

The program has had a particularly positive influence on the employment prospects of women and indigenous peoples. In comparison to non-grantees, female recipients were employed and held managerial positions in much larger percentages. Indigenous grantees were working in the same

percentage as Hispanic beneficiaries at the time of the study, despite being less likely to be employed at the time of application. They worked more than non-recipients from indigenous communities. Scholarship beneficiaries, primarily teachers, have been urged to work and live in rural regions because they participated in the program. Although there was no major difference between non-beneficiaries and professional development program participants at the time of application, a significantly higher percentage of professional development scholarship recipients worked and lived in rural areas at the time of assessment.



Figure 5.8: The SEED Program supported US public diplomacy activities in addition to the technical and developmental effect of program alumni. In communities across the United States, American individuals and businesses have had the opportunity to form constructive and profitable relationships with young leaders from Latin America and the Caribbean. This benefits citizens in the United States and all member countries in terms of political, professional, and trade relationships.

Source: <https://cied.georgetown.edu/scholarship-for-education-and-economic-development/>.

Scholarship recipients are more likely to be hired and hold professional and management jobs than similarly qualified students who did not get scholarships. Because participants in professional development programs

were fully employed in both groups, this finding only pertains to the two-year program. Credentialing cannot describe the beneficiaries' paths to achievement in general. Only a small percentage of scholarship recipients in any program were able to get their scholarship qualifications legally acknowledged. Only a few two-year scholars were recognized for obtaining equivalence for courses studied in the United States when they returned to school.

The bursary program had only a minor impact on the participation of the community. About two-thirds of the beneficiaries completed their community action plans. The number of non-recipients and recipients' members of community groups or the sort of organizations to which they participated did not differ substantially. This could change as the SEED program, as a greater share of SEED scholars are community organizers than CASS scholars, emphasized developing and implementing Community Action Plans. Considering the current development of SEED and the comparatively few SEED scholars found in this study, it is impossible to determine the results of the increased importance at this time.

The academic approach has helped beneficiaries to gain international understanding and has supplied tools for international information sharing. After completing their bursary program, most recipients continued to communicate with classmates from other countries. Over 35% of these people use electronic communication means such as Facebook, Twitter, and email. The reason for communication was most frequently mentioned for business reasons. On the other hand, non-recipients mainly communicated over the telephone with local ex-class colleagues. The scholarship program has boosted good impressions of the United States by providing the opportunity to live abroad. Only approximately half of scholarship recipients said they had a favorable impression of the United States when they applied. At the time of the survey, more than three-quarters of the beneficiaries had a favorable opinion of the United States.

5.2.4. API Study Abroad Program at the University of Belgrano

API and the Universidad de Belgrano (UB) team up in Argentina and Buenos Aires to offer students the opportunity to study. Students interact with more than 11,000 students, including 2,000 students worldwide, and learn Spanish and English. UB classes are suitable for students at all Spanish levels, with a range of alternatives for both beginners and experts. In addition, during the summer, students can study 100 hours of Spanish and rotate in the clinic.

They also offer a summer training program for those who wish to teach English or Spanish on credit. Fortunately, thanks to professional writing services that guarantee a single-day job delivery, you can easily balance all these educational curricula and complete them. Students of the program have the chance to live with their native families to maximize language and cultural immersion. In addition to local activities, API staff also arrange weekend trips to different other parts of Argentina. Some of these programs include:

- Latin American and Argentine Semester Studies in Buenos Aires: API's Program of Argentine and Latin American Studies in Buenos Aires is perfect for students fascinated by Argentine and Latin American culture, politics, history, and economy. Students of all levels of Spanish are welcome to participate in the program. Students who choose the Early Start option take an intensive Spanish language course before the regular semester begins. The intense Spanish course comprises five hours of Spanish instruction each day, for four weeks, five days a week, for a total of 100 hours of contact in Spanish education (Creighton & Park, 2010). Each intense course equals three to six-semester credits, dependent on how the home university delivers the credit. Beginner and intermediate Spanish speakers will complete all English classes once the regular semester begins. Students who have completed at least four semesters or the equivalent may choose to combine Spanish and English optional courses. Students that have advanced skills in Spanish are welcome to take up to four courses with Argentinean students.
- Spanish language studies that are semester intensive in Buenos Aires: It is intended for learners who wish to develop their Spanish abilities fast by studying abroad. This program does not offer cultural options; students take a series of intensive Spanish language courses.
- Summer Medical Immersion Program in Buenos Aires for Spanish Speakers: Participants will complete 100 hours of clinical rotations at the Hospital Británico while earning 6 credits in the Spanish language. The mornings will be spent at the hospital, while the afternoons will be spent learning Spanish and attending seminars with local medical specialists.



Figure 5.9: During this crisis, countries are reacting in novel and adaptable ways. They're using a variety of channels and media to make teaching and learning easier. All the participating countries set up a national repository of digital resources (and, where possible, offline learning materials) and/or a learning management system (LMS) that allows students to communicate with their teachers.

Source: <https://borgenproject.org/tag/education-in-south-america/>.

- Spanish language studies that are summer intensive in Buenos Aires: The Intensive Language Program is for students who desire to study in Buenos Aires while focusing solely on strengthening their Spanish language skills. This curriculum does not include any cultural electives. Prior to departure, all students must take a placement test. When you arrive in Buenos Aires, you will be given a language level.
- Summer Latin American and Argentine studies in Buenos Aires: This program, combined with one of the five courses on the art, literature, and culture in Argentina and Latin America, offers several highly middle-edged and advanced Spanish speakers the possibility of learning abroad in Buenos-Aires. An online written placement test is complete for all students before leaving. The Intensive Language Program at the University of Belgrano is requested for those who do not demonstrate a high level of Spanish.

- Internship for Spanish speakers on Summer teaching in Buenos Aires: This program, coupled with one of the five courses on the culture, literature, and art in Argentina and Latin America, offers several highly middle-edged and advanced Spanish speakers the possibility of learning abroad in Buenos-Aires. An online written placement test is complete for all students before leaving. The Intensive Language Program at the University of Belgrano is requested for those who do not demonstrate a high level of Spanish.

5.2.5. The Youth Entrepreneurship Program in South America and the Caribbean

In cooperation with YBI member organizations in 10 countries, the YEP has trained 64,000 young men and women with entrepreneurial skills. Nearly 20,000 businesses were launched or strengthened; more than 13,000 new jobs were created, and one year after the project received support, 86% of the enterprises supported increased sales. All 10 local enterprise support organizations report increased capacity for quality entrepreneurial services in the digital economy that respond to the changing needs of young people.

Thousands of stories are behind the numbers of young people whose lives have been improved by supporting the YEP. Youth in La Paz like Mayvelin, who at the age of 21, had difficulty finding work for their community and wanted to do good for them. Thanks to the program's support, she started a pastry shop with healthy sweets made from traditional Bolivian products. Shaquille overcame the hearing impairment barriers since he was born and established an affluent company in Jamaica that sells hand-made sandals. In addition to their young people, all beneficiaries faced disadvantages due to their disability, cultural identity, gender, socioeconomic condition, or distance from mainstream services. Most of the women (64%) came from peri-urban and rural areas.



Figure 5.10: In summary, the goals stated above represent the objectives of state schooling in the Americas throughout the last 50 years. Equality of access is a hot problem for ongoing research, particularly at the level of adult literacy. As differences in the achievement of certain sectors of society continue to increase, especially when it comes to gender inequities, equity of opportunity has become an even more pressing issue.

Source: <https://www.crowdfunder.co.uk/education-and-conservation-in-south-america>.

Continuing to adapt to the changing digital environment, the program's capacity building has progressed, and organizations can support the integration of digital through both their subject matter and service delivery mechanisms. A Digital Accelerator has established roadmaps for digital maturity and has awarded grants to develop solutions that enhance the accessibility, flexibility, and relevance of entrepreneurial services among young entrepreneurs today. YEP has left behind strong organizations that operate together for young entrepreneurs to drive innovation and increase their services (Cox, 2013).

Through its YEP, YBI has enhanced the methodology of training, built successful mentorship programs, and increased monitoring and appraisal, communication systems, and management systems. There is now an online community platform with discussion groups and a resource library

to facilitate continued cooperation. YBI builds on the results of YEP in the future, continues to extend services, and strengthens practices for vulnerable youth in Latin America and the Caribbean. We use teachings and substantiated methods to measure our effectiveness, tackle network-wide youth unemployment and reach more people using digital solutions. Over the past three decades, youth unemployment in Latin America and the Caribbean (LAC) has been a chronic issue, with youth unemployment rates always doubling or tripling the national average.

In LAC, 13% of youth were unemployed at the commencement of the YOP in 2013, compared to a regional unemployment rate of 5%. The issue has not improved; thus, the program remains as important as ever. For 2020, the ILO predicts a global youth unemployment rate of 13.8%, with 18% in Latin America and the Caribbean. Young people face a fragile job environment, with three out of every four young people working in the informal sector. Not only is it critical to address the youth unemployment crisis, but it is also necessary to ensure long-term, inclusive development, and social cohesion. Empowering young people to start and run their enterprises is an important part of the solution. Young entrepreneurs help to shape local economies by creating new jobs. Youth possessing entrepreneurship skills are better suited to deal with the problems of today's fast-changing work market.

However, entrepreneurship is difficult in any setting, but it is more difficult in countries like LAC, where the ecosystem is underdeveloped. Many young people do not see entrepreneurship as a realistic career option, and they frequently lack the necessary skills and expertise to start and grow a company. Access to high-quality entrepreneurship support services is widely lacking, particularly among people from underprivileged backgrounds. Because of their perceived risk profile, some services, such as start-up financing, are not available to youngsters. On the other hand, youth from underprivileged circumstances lack a network of friends and relatives who can provide early financial and emotional support. In October 2013, Young Business International (YBI), throughout collaboration with the Inter-American Development Bank, established the Youth Entrepreneurship Program in South America to react to the youth unemployment issue and tackled entrepreneurship as a pathway to jobs.



Figure 5.11: Both public and non-profit entities provide volunteer opportunities. From one organization to the next, management style and administrative/management structure differ significantly. In general, government institutions are more structured and bureaucratic, but tiny non-governmental organizations (NGOs) are the opposite: spontaneous, democratic, but frequently lacking in structure and planning, making it harder for volunteers to find their place in the organization.

Source: <https://www.tc.columbia.edu/articles/2019/september/dialoguing-on-education-policy-in-latin-america/>.

The initiative's goal was to expand the proportion of low-income children who were able to effectively start and maintain their enterprises and create new jobs. It also planned to make a long-term contribution to the fight against youth unemployment by bolstering the region's entrepreneurial support services. The project's main objective was "the establishment of a regional platform for coordinated design, partnership building, and knowledge exchange." YBI has developed, strengthened, and established a prosperous knowledge community through YEP that has continued to work together to constantly improve and expand services and its partners in the LAC sector.

Each of the 10 countries received grants to develop and deliver its core services to young undergraduate entrepreneurs in local business support organizations in the YBI network. Each identified an aspect of its service

that they were interested in testing and developing, strengthening their core services with YBI support. Business services include entrepreneurial and life skills training, consulting, technical consultation and mentoring services, and access to finance. Financial education and direct funding through seed grants or loans are also included in several countries. YBI assisted its members in accelerating digital solutions, with numerous members providing services to entrepreneurs via web smartphones and digital apps established during the initiative (Cole & Murphy, 2009).

Even though the project was created before the Sustainable Development Goals were released, its actions directly addressed SDG5 (Gender Equality) and SDG8 (Decent Work and Economic Growth). All the country's projects, which spanned urban, peri-urban, and rural settings, targeted underprivileged youth aged 18 to 35. Women's access to services was a goal of the projects. Women made up 64% of the project's recipients. Several country projects focused on young people who were particularly vulnerable to social and economic exclusion, like young migrants and people with disabilities.

Throughout the program, YBI's capacity-building assistance was developed to meet the changing requirements of the member organizations and the adolescents they serve. Initially, YBI concentrated on developing core services and capabilities, such as data management, monitoring and evaluation, mentoring services, and designing and delivering life skills and entrepreneurial training via organizational management systems. During the project's final two years, the emphasis on capacity development changed to assisting organizations in innovating their services and integrating digital technologies. Learning was accelerated and embedded because of YBI's network concept of constant accompaniment and interaction.

The capacity-building paradigm is beautifully illustrated through the introduction and improvement of mentorship programs for YEP members. Through an in-person workshop followed by virtual support, YBI worked one-on-one with each member to develop their service offer in this area. Once a member organization had developed a mentoring program, the mentoring coordinator was invited to join a monthly teleconference with peers from throughout the region and a mentoring expert to discuss difficulties as they arose. In addition, YBI's pool of specialists provided global in-person masterclasses and webinars on mentorship that covered growing key themes in depth.



Figure 5.12: Even while enrollment has expanded dramatically, service quality has remained poor throughout the board. Low-income households, those living in rural areas, girls, native tribes, and specific races and ethnicities are among those who have felt the compounded impacts of the system's flaws.

Source: <https://www.borgenmagazine.com/education-in-latin-america-and-india/>.

5.3. THE EDUCATION FOR ALL PROGRAM REPORT ON EDUCATION PROGRAMS BY UNICEF

In compliance with the principles and focus established by the regional Ministers of Education on the Latin America and Caribbean Regional Education Project (PRELAC) in the region, a strong component of monitoring and description of the state of education of the region needs to be set out clearly and concretely to achieve its goals in Education for All. While the EFA's 2015 objectives specify the horizon to be monitored in terms of expected results, it's also important to include analysis and monitoring fields to identify the components that will require to design policies and actions to help decide the components of the map of interrelations between education processes and actors.

The State of Education in Latin America and the Caribbean, 2007, is an attempt to summarize the education situation in the area based on a rights-based content model to education while paying respect to the features

and aims of EFA and their global form described in PRELAC. This has ramifications for what we consider to be high-quality education for all (Chang, 2019).

The formation of significance and the building of capacities are linked to the development issues that countries and people must face (relevance) and the unique circumstances of individuals (pertinence). It also has a non-coincidental but significant relationship with how individuals operationalize some of the goals of education policy (efficacy) and reinforce operational principles that are unique to modern society (which include efficiency in the public resources use). As a result, there is a link between the present concept of the world of social, political, and civil rights that affect all individuals' lives (equity). In this regard, and by the characteristics and indicators provided, they discovered information that allows us to draw the following conclusions:

- In most countries, although with a varying degree of emphasis, all four pillars (learning to know, to do, to be, and live together) have been mentioned. Learning to live and know together is increasingly being developed in the general curriculum and at the regulatory level and in particular study programs. On the other hand, learning to do and being is not in the same order or underlined in various study subjects or learning.
- Curriculum revisions have aided in recognition of students as the core of interactive teaching and learning. On the other hand, active student engagement is rarely considered when developing the ability to think about and take responsibility for one's learning process. This is in line with the low priority placed on teamwork, leadership, and student autonomy, and the development of innovative and creative qualities.
- Advancing the internal coherence of the curriculum is necessary to give importance to and make essential concrete objectives in each area or subject of learning – especially regarding the development of ethical attitudes and behaviors, both in terms of learning to live in united relationships. This refers to students' education in the development, formation, and respect for us and others of personal and social ethics based on knowledge and adherence to human rights. In different nations, significant progress has been made in integrating multidisciplinary integration-related cross-cutting and basic objectives, which has been aided by a clear and

consistent framework with criteria that enable teachers to make learning integrated more successful.

- The creation of policies for inclusion in education must continue, with a focus on school reform so that all children, regardless of their circumstances, can participate and learn. The current rules are largely intended to measure students' cultural, social, and personal diversity. However, we must increase the design of strategies and laws for the rights and principles of education to be effective. On the one hand, policies and programs that assure consistency among programs, policies, and principles, as well as measures to make them more efficient, must be devised to meet their diversity (Cortina, 2013). Coordination across multiple operational levels of education systems should build mechanisms that allow different actors to acquire ownership of these programs, policies, and concepts.
- The regulatory sector, as well as levels of supervision and appraisal of services delivered – such as those provided by schools and various levels of administration and participation in the creation of educational services – must be created. Decentralization processes should accompany this imperative.



Figure 5.13: Latin America boasts a stunning environment as well as a diverse cultural legacy. It is made up of the South and Central American continents. In-

ternational students who aspire to study abroad will find Latin America's rising economy and education sector to be beneficial.

Source: <https://www.freestudy.com/tag/latin-america/>.

- Given the reality of our region, training, technical aid, and supervision of the primary actors, particularly teachers, has become critical for the establishment of inclusive schools, with a focus on issues of social justice.
- The Dakar goals remain a distant horizon that, while closer presently, nevertheless necessitates increased work. In this area, progress has been minimal, and greater efforts are required if we meet the targets by 2015 – even the most basic components such as ensuring universal completion of elementary school and the attainment of basic learning that is essential for all people. The presence of groups living in bad conditions – residents of rural areas, indigenous and poor peoples – and those whose right to excellent education is denied, even in nations where progress is stronger in terms of goals such as universal primary school completion, demonstrates the need to design public education action better and set specific objectives.
- The region is advantageous than other sections of the developing world regarding access to early childhood care programs, evident only through preschool programs. However, even though the situation is generally favorable, we must recognize the major differences between population groups and countries.
- Levels of secondary school completion and access are similarly varied. Although at least three out of four children in a substantial number of nations have access to such programs, access and completion rates below 50% are difficult to achieve in other countries. Few countries have a high school graduation rate of at least half of the population, and even fewer have a study rate of less than one out of every three persons.
- However, accessibility to university education is the most significant factor in separating nations in the region. The disparities in student volumes – compared to the population size – are so remarkable that the largest observed proportion is 14 times that of the smallest. As a result, Latin America has a higher

proportional volume of enrollment, whereas the Caribbean has a higher international migration rate.

- Millions of individuals in the region claim they are unable to write and read. These individuals should be at the center of education policy for adults and young people and those who have not completed primary or secondary education to reclaim their entitlement to a high-quality education, which has been denied in recent decades—ensuring that all children complete primary school and the associated learning, educational systems in the region will be less likely to produce more illiterate people.
- For decades, the region has been marked by high proportions of older students than their grades. Late entry, grade repetition, and drop-out are all elements that have historically been part of educational processes, with the result that the likelihood of continuation and completion of studies has decreased.
- Students in systematic education systems are either retained or expelled. Only 60% of people who attend primary school regularly maintain this status until the end of primary school. On the other side, the size of the pupils who have been delayed is inversely connected to completion rates. The lower the standards of completing, the more delays or expulsions systems cause.
- Repetition of grades, whose pedagogical value is debatable, has not only a minor impact on educational trajectories, reducing the possibility of completion of the study; it also represents a twofold cost for the nation as a whole – via the state – and for the families directly concerned. The cost of repeated grades in secondary and primary school is estimated to be about US\$11 billion, according to the data. This resource waste is concentrated not just because of the quantity of the population in Latin American countries but also because in the Caribbean countries, and grade repetition is not typical.
- In recent years, the region's public education resources have steadily increased. It resulted from increased tax income and economic growth, not because the industry was given greater attention. As a result, the percent of total government spending on education has remained steady. The goal of education and inter-sectoral policy is to achieve a balance that allows us to spend

more and more while reducing the inefficiencies indicated above (Brandhorst, 2011).

- The available data allows us to explore this topic in the first instance to study and compare populations characterized by gender in general, domicile, income, poverty, and ethnic group membership. Inequities in the countries are an example of the urgent need to focus resources on meeting the needs of the most vulnerable populations, including rural residents, indigenous peoples, and people of African origin, as well as those with lower incomes or who are in extreme poverty. Not only in the case of access to education are these disparities present. Rather, they further intensify their studies for higher education levels.
- The dissemination of data concerning discriminatory practices reproduced daily in schools will enable us to reach the analysis more thoroughly so that more data can be provided to support policy design.
- It is critical that resources be focused on public schools to help them develop their tasks more effectively and compensate for variations in educational outcomes caused by student socioeconomic status. While serving a population with varied needs, public schools are severely lacking in resources and abilities. It is encouraging to know that schools serve high-needs populations and get greater results, demonstrating that children's social situations have no bearing on their ability to learn. This demonstrates that, with appropriate legislation, proper resources, and solid, skilled, and emotionally dedicated stakeholders, public schools may make a significant contribution to improving opportunities and ensuring the right to education.

To achieve education goals for everyone and guarantee the right to an education, Latin American and Caribbean states present a difficult mixture of progress and challenges. A lot needs to be done to achieve quality education for everyone. Such education needs to consolidate, sustain, and face the pending difficulties identified in the focus of rights and each dimension. Progress in national education law and required curricular frameworks must be supported by creating procedures to ensure that they are implemented at the school and in the classroom. It is critical to use a comprehensive approach to advise, train, and help schools to refocus their activities and culture, adopting practices that benefit diversity. As a result, it is critical

to ensure that all the various resources allocated to education contribute in these ways.



Figure 5.14: Primary schools in Latin America are regarded as basic services as they are in most other regions of the world and are offered in public schools free of charge. Parents enroll their children in alternative institutions more and more.

Source: <https://edtechreview.in/trends-insights/insights/2082-primary-education-in-latin-america>.

The importance of achieving the primary objectives defined as part of the quality of education provided to all people worldwide and nationally must be emphasized. Reduced illiteracy, early childhood care, universal primary school completion, attention to the needs of adult and young people, closing equity inequalities, and learning relevant to the needs of the modern world remain significant goals. Educational systems have a key role in preventing socioeconomic inequalities from worsening, and they must be addressed to ensure that everyone has access to a high-quality education.

In conclusion, the supply of teachers has risen in the field of higher education (mainly through private programs) and during career, but only about a fifth of the faculty does have doctoral education. Net registration rates of the aged 18 to 22 were up nearly 25% in the late 1990s, from fewer than 4% in 1960. Unfortunately, the rapid expansion of undergraduate registration did not lead to a higher degree level. Thus, graduates (those who received vocational training) were recruited to occupy additional post-secondary positions. High dropout and repeat rates in the initial years of higher education and transfers to other programs are associated with poor

secondary education and professional careers beginning in the first year of post-secondary study (Bonal, 2007).

Some universities are experimenting with one or two years of college (like community colleges in the United States) to cut down on time and tuition waste and student disillusionment and wrath. Partnerships of local and foreign universities offer master's degree programs in specific fields, particularly those needed by private industry. The training packages frequently include some remote education or visiting academics. The Monterrey Technological Institute (Mexico) is a renowned institution in this field, with students from Latin America. However, boosting the quality of higher-education personnel necessitates doctoral training in conjunction with research.

The report on monitoring underlines the need to have access to in-service training relevant to the difficulties raised in the educational sector's political and institutional context to ensure that the intended objectives are met. In this regard, regional and national education information systems must be reinforced and improved. Many countries in the region have built procedures in recent years to consolidate their systems for delivering reliable, timely information regularly. However, discussions between decision-makers and those responsible for information systems should be promoted and reinforced to develop theoretical models and indicator systems, find knowledge gaps, and improve ways of presenting it and maximizing existing procedures.

The proposed model for indicator systems was not built using the rights-based methodology applicable to education, as detailed in *Quality Education for All: A Human Rights Issue*. This study required efforts to reexamine the material available from this viewpoint and build unique informatics. However, there is a significant quantity of knowledge that must be addressed through additional study and initiatives to improve vocational education indicators to increase their accuracy, validity, and, most importantly, relevance to current educational practices. Many of UNESCO's current EFA/PRELAC efforts are geared toward assisting these regions. However, all countries must be dedicated to and participating in the region to have more responsive information to the region's educational policy goals.

America is a vast, nuanced country. However, it is our responsibility as neighbors to come together as a common global good in global growth and international cooperation that are crucial to each other. Educando works for a specific example: quality training for all our citizens. International Grantmakers in the United States are overlooking Latin American education

(Behrman et al., 2001). Latin America receives only a small percentage of foreign aid.

Furthermore, just a small portion of international funding goes to education, and of that, only a small portion goes to K-12 education. The huge and ongoing interchange of individuals, commodities, and services between the United States and Latin America's two major economies, Brazil, and Mexico, is incentive enough to maintain an open discourse throughout the continent. Respect and common decency should be enough to seal the deal.



Figure 5.15: Education is a basic human right as well as a critical instrument for people's and communities' growth. It is critical for the development of human capital, breaking the cycle of poverty, increasing economic productivity, and reducing social gaps and injustices.

Source: <https://soeonline.american.edu/blog/5-ways-policy-makers-can-improve-the-quality-of-education>.

There is still much work to be done to bridge the divide between the rich and the poor, the dominant and the indigenous, the rural and the urban. If not done quickly, the repercussions of a highly sophisticated global economy would not only under-serve, and under-utilize huge human resources but will also aggravate inequality in specific countries as well as throughout Latin America. To provide incentives to highly qualified education relevant and accessible to students of all aspects of life, the quality of the teaching force must be improved and adequately compensated (Balán, 2006). To

give administrators more systematic data about making decisions, valid instruments for measuring service quality must be expanded. To bridge the gap between elementary and high school enrollments, we expect more pupils to stay in school. Increasing the educational quality Equitable and compensatory programs must be devised to reach the most disadvantaged parts of Latin America to improve the quality of life and increase economic prosperity for entire communities. As the degree of education becomes more widely distributed, the income – which in turn provides opportunities for all – will increase.

All in all, any foreign student making the decision to study abroad, especially in Latin America, is making a huge decision. Regardless, whether you want to obtain resume-boosting work experience in one of the world's largest economies or discover the unique cultural wealth of ancient ruins, Latin America's education programs and schools will provide you with an unparalleled experience. While Europe lacks the affordability and simplicity of jet-setting in South America, each country is characterized by spectacular cultures, countryside, education, and easy student movement across the continent. International students can benefit from a unique cultural immersion and cheap educational programs at Latin American leading universities.

Chapter 6

Educational Labor Unions in South America

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6.1. INTRODUCTION

Education is one of the essential tools for developing human skills and overall freedoms to live the lives they deserve. Education is also critical for the establishment of democratic values, social evolution, and economic prosperity. As a result, when an educational system fails, the consequences are severe. Due to the deficiencies in the Argentine educational system, education has been shown in several studies to be a factor in reinforcing rather than eliminating inequality. Low-income individuals do not have accessibility to high education and do not complete secondary school.

In comparison to other countries that invest equivalent amounts in education, the achievement is low. As a result, despite Argentina's high net enrolment numbers in elementary and lower secondary school, poor quality is perceived. In Latin America, there is widespread agreement that solid teaching is critical to school improvement. As a result, the region is paying more attention to teacher incentives and affecting teaching performance. Career regulations and methods for teacher recruitment, selection, and advancement, in particular, are gaining a lot of attention.

However, it was difficult to make reforms in these areas, mainly because of the hostility of the teachers' unions to measures they feel harmful. This research aims to provide empirical evidence on the nature and impact of education unions in South America on educational quality. The effects of teacher unions on variables, including budget allocations, class size, tenure status, class day, and teacher satisfaction, influencing the learning experiences of the primary pupils are significant. Other factors, including special laws and regulations governing professorship and employment opportunities and their possible links to the (political) position of the unions, are also regarded.

One of the most controversial discussions in union literature was how unions influence business success. While most literature agrees that trade unions mainly have negative impacts on profitability and investment, the trade unions' productivity is not widely accepted. The uncertainty surrounding such issues, to some extent, reflects issues with data limitations and underlying heterogeneity in the union effects of countries, industries, and companies (Balán, 2006). Even though there is substantial literature on "what unions do" for establishment production in advanced economies, there is less data on "what unions do" for institution productivity in emerging economies. It is unclear how unions affect productivity in emerging nations because they confront different types of impediments than

those in established economies, such as uncertain business environments, less competitive markets, high levels of corruption, restrictions on access to capital, and unfavorable institutions.

This research aims to add to the body of knowledge by examining the effects of labor unions on performance in six Latin American countries: Uruguay, Panama, Mexico, Chile, Bolivia, and Argentina. Because of the differences in their economic environments and adaptability to market reforms, a cross-country study could better understand the relationship between unions and productivity.

Teacher unions (also known as “educational unions”) are organized to defend and promote the mutual interests of teachers and other education employees. Educators’ common goals and how they can be followed have been and continue to be hotly debated topics within these organizations. Multiple unions have reacted differently to these issues on different occasions, such as the degree to which an agricultural or vocational orientation should be followed and how a broader political and social justice platform should be supported.

Many ideal-type models of teacher unionism have been established and different political options that these unions could use. There is a heated discussion going on over the authority and influence of teacher unions. One viewpoint sees them as self-serving special interest organizations, while another sees them as progressive campaigns fighting for higher education. The role of teacher unions as partners in educational policymaking is disputed, and union–government ties vary from those that promote negotiation to those marked by conflict and hate.

Education unions face major problems on a global scale in the early decades of the twenty-first century. Neoliberal economic and industrial reforms and laws have weakened workers’ ability to unite and strike collectively, as the global school reform movement (GERM) has created a toxic climate for education unions and their affiliates. Despite these obstacles, school unions are among the most vocal opponents of GERM and global neoliberal social policy in general. The challenges faced and the solutions implemented vary across the globe (Balán, 2006). There is evidence that at least some unions are now willing to be much more pragmatic in implementing a “bouquet” of tactics, such as examining their internal organization, forming partnerships, and developing new visions of the future of education. However, researchers have found many internal variables in several teacher unions that pose major challenges to these tasks. Unions must make tough decisions that can result in marginalization on the one side or integration on the other.



Figure 6.1: The Global Education Reform Movement (GERM) in 2017: A Year in Review.

Source: <https://arkonline.org/blog/global-education-reform-movement-germ-2017-year-review>.

“Teachers are workers, teaching is a job, and the school is a workplace,” on one basis. Even so, the status of teachers as employees is compounded by the fact that teaching is (primarily) situated in the public sector, that it is ‘white-work, collars did for the majority of women, and “knowledge work.”’ This work aims to improve students in a “social-practice capacity.” Despite a body of literature on teachers’ jobs, the problems that arise from these “complications” have yet to be adequately theorized.

Likewise, theoretical analysis of the structure and position of the teachers’ unions stays very much in advance despite an analysis based on different paradigms of study (e.g., sociology, international relations, labor history, economics, and political science). Authors in the teacher’s unions inevitably adopt a normative stance that sympathizes or opposes them (whether or not this position is explicitly acknowledged). It is thus frequently paired with lobbying, for example, in the protection of teacher unions, in favor of a specific teacher union model, or, alternately, to make their practices more restrictive. The relatively recent work of Bascia and Bascia and Stevenson’s comparatively recent study—working alone or with collaborators—is remarkable in its consideration of teachers’ work and teacher unionism, incorporates theoretical and methodological aspects,

and takes an international viewpoint. This chapter acknowledges their shortcomings and restrictions while sympathetic to teacher unions. Moe is a prominent leader in the teacher union event. What do educators' social goals include and what can be done within these groups, and how do they stay involved with concerns and questions for discussion.



Figure 6.2: The role of Teachers' unions.

Source: <https://observatory.tec.mx/edu-news/the-role-of-teachers-unions>.

Due to the extent that industrial and vocational orientation should be followed, the essence of the schedules, and the importance of the more general policy and social justice platform, some unions reacted differently to these issues on various occasions. Human organizations are shaped by numerous internal or external historical, political, social, legislative, and economic forces that vary between locations and times, consisting of persons and communities of diverse situations, varying contexts, and interests (Balán, 2006). Although in African, Asian, South American, and Eastern EU countries, teachers' unions—especially those acting independently of the contractor or control by the state—are more recent, in many western countries, teachers' unions can be traced back to the late 19th century, with education being conducted mostly under the control of public school system rather than individuals.

Education in Latin America suffers from low funding levels, inadequate resources for the insufficient, political inertia, and chronic tensions with educational unions. The remedies are not magically or outside human capacity. The secret to transforming education in the area is taking steps to lay down levels of excellence and efficiency, improving the teaching

career and increasing expense for those in need. There needs to be a serious examination of schools in Latin America. Though entries are on all levels, most children are under-educated. About one-half of Latin American students have performed at or below the lowest level of competence in contemporary international mathematics and science examinations, showing that they have difficulties adapting simple principles to real lives. Only 10% of students in Finland and an average of 20% of children in the OECD countries ranked at this stage, on the contrary (Alzúa et al., 2015).

Poor administration aggravates the problem. The teaching system—from recruiting to management preparation—fails to promote excellence. School students are seldom in the best grades, are often poor, and the best teachers are too poorly distributed to needy students who most need them. In addition, incompetent teachers cannot be taken out of the school.

Frequent tensions between teachers' unions and governments, which result in protests, such as those in Honduras and Nicaragua, threaten to deprive students of valuable school days.



Figure 6.3: Labor Unions in Brazil.

Source: <https://thebrazilbusiness.com/article/labor-unions-in-brazil>.

Teacher (or educational) syndicates aim to defend and promote teachers and other education workers' common interests. These group interests and how they can be pursued have become active topics for discussion and continue to function.

Because of the rise of neoliberalism, these discussions are as important today as they have ever been throughout the past of these organizations. Neoliberalism means abandoning a mixed economy favoring more competitive “free-market” capitalism, promoting marketed and global economic and financial frameworks, and restructuring government policy to achieve these goals. The global school reform movement, or GERM, is a particular expression of neoliberalism in education. GERM has advocated for fiscal restraint in school finance, emphasizing the economic position of education, competitiveness, preference, transparency, corporate-style manager styles, marketization, and public-private partnerships, among other aspects. There are some ideal-type examples of teacher unionism and appropriate management alternatives that unions could use.

As described by numerous authors, an “industrial model” of teacher unionism promotes enhancing members’ wages and conditions by collective agreements, industrial lobbying, and strikes like other labor unions.

Union officials are primarily in favor of focusing on these topics. In the second half of the twentieth century, an emphasis on improving members’ wages and conditions through collective bargaining, workplace campaigning, and protests, in a way compatible with other trade unions, became a dominant characteristic of many teacher unions’ practices, delivering real increases in teachers’ remuneration, job protection, and working conditions in many cases. However, under some regulatory regimes, industrial production is heavily restricted. With the rise of neoliberalism, this has been increasingly the case in places where the industrial model had previously been deeply established. Furthermore, this paradigm has been chastised for failing to understand the educational and “caring” aspects of teachers’ jobs, as well as their ability to exercise professional judgment (Warren, 2010).

A union’s strategic direction is dictated by various internal and external considerations that may be ideological, democratic, or realistic. A competitive political environment may make closer relations tactics inaccessible; on the other hand, a climate in which the position of unions is understood and promoted, and which has resulted in gains for union workers, may promote sustained detente between the union and the employer/state (and discourage exploration of other options). Membership distribution and diffusion, the union’s financial position, its tradition of success and loss, and whether the union competes for members with other unions are also important considerations. Over thirty years of neoliberal social, fiscal, and educational policy have raised the stakes in discussions regarding the existence and

position of teacher unions. The future of teacher unions is far from certain. Major issues are posed by social and economic shifts, especially industrial and educational changes brought on by the rise of neoliberalism. To sustain and succeed in the face of these external threats, intelligent approaches and organizational reform are needed.

Evidence suggests some unions are now willing to be much more pragmatic in embracing a “tapestry” of policies, exploring their internal organization, forming partnerships, and creating new visions of education’s future

6.2. ARGENTINA EDUCATION LABOR UNION ENVIRONMENT

Argentina’s education rate is comparatively high. Primary school registration is 97%, literacy is 96%, and high school registration is 67%. The total enrolment rate of public institutions is 9.7 million (70% in primary education), 650000 (540000 teaching positions), and 52 177 schools in the system and 76%. Even if the provinces are very different, an average of about \$900 (\$740 per student in basic education) is paid per student. Although there are significant interprovincial differences, teacher pay accounts for more than 80% of spending compared to other countries. This high percentage could be due to union strength to defend the wage share of the budget in a time of fiscal restriction. It backs teachers’ unions’ prioritizations of salary demands, as evidenced by examining Argentina’s largest teachers’ union’s demands.

The provincial-level assigned primary and secondary school duties (primary since 1978 and secondary in 1993). Only 43% of primary schools, compared to 75% and 83% of vocational schools, were domestic in the 1952 centralized period. Thanks to the 1993 Federal Education Act 24049, provincial and provincial jurisdictions regulate sharing of responsibilities among nations, and provinces are now prominently active in the employment, administrative, educational and financial.

The central government develops the national curriculum, assesses the system, administers remedial initiatives, and supports teacher education programs in collaboration with the regions. In international terms, the province, rather than the national, municipal, or school level, is heavily involved in the administration of Argentina’s educational system.

Because practically all schools are governed by the province government, decisions about state education budgets, teacher wages, and conditions of

employment and rules (*Estatutos Docentes* and *Convenios Colectivos*) are mostly made at the local level. As a result, the most appropriate level of analysis for unions' political and labor-relations implications is the province level because education is decentralized at the provincial level. Most unions are organized at the provincial level.

6.2.1. How Education Has Been Influenced by Unions

Various institutional aspects of Argentina's school system and educators' unions distinguish it from the US system, making it nearly impossible to duplicate Hobby's landmark study in 1996. At the provincial level, education is "decentralized," and most labor unions are also organized there. Working conditions, teacher wages, budgets, and rules are all factors to consider.

(*Estatutos Docentes* and *Convenios Colectivos*) are collective bargaining agreements between the state government and teachers' unions that apply to all schools and teachers, regardless of their allegiance or involvement in the bargaining process or selecting union leaders. As a result, teachers' unions affect all schools in the same province, even those where instructors are not unionized. This institutional aspect makes cross-sectional analysis at the school level more difficult (Warren, 2005). As a result, the highest disaggregated level feasible in both the labor-relations arenas to examine and provincial political for the potential effect of unions on education is that of the province. Learning is influenced not only by elements at the provincial level but also by the socio-economic characteristics of the student's family and the classroom and school conditions. The analysis, therefore, requires the treatment of different aggregation levels.

6.2.2. Teacher's Union Background

Argentina's teachers' unions have taken a more aggressive stance, organized mostly at the regional level. Around 350,000 teachers are unionized, making it one of the most unionized states in the US (55%). Teachers' associations conducted more protests and strikes than most other sectors and engaged in the development of the educational system.

In the late 1800s, the beginnings of professor's unions can be traced. The first teacher association in Argentina, the *Liga de Maestros*, was established in 1892 in the Province of San Juan. In Corrientes, Mendoza, Tucuman, Cordoba, Buenos Aires, Rio Negro, Entre Rios, Santiago del Estero, Misiones, and Catamarca, there were several other provincial teacher associations which have failed in numerous occasions to form a national

federation. The Union of Argentine Teachers was created in 1950 and eventually became the UDA, under the authority of the Peronist government (Union of Argentine Teachers).



Figure 6.4: Striking Argentinean teachers stage a protest in Buenos Aires.

Source: https://english.elpais.com/elpais/2017/03/07/inenglish/1488890159_001475.html.

As a result, most of the following teaching organizations, such as UDA and AMET, founded as national teachers' associations with nationwide coverage, sprang up with some exceptions in a decentralized manner. A coalition of 147 provincial unions formed the Confederation CTERA (Central Trabajadores of Education of the Republic of Argentina) in 1973. With 200,000 members in Argentina, CTERA is the country's largest teachers' organization. Because it was established to alleviate sector fragmentation, subsequent fusions have decreased the number of component unions to one per province.



Figure 6.5: Palacio Pizzurno (Ministerio de Educación), en Recoleta, Buenos Aires.

Source: [https://en.wikipedia.org/wiki/Ministry_of_Education_\(Argentina\)#/media/File:Palacio_Pizzurno.jpg](https://en.wikipedia.org/wiki/Ministry_of_Education_(Argentina)#/media/File:Palacio_Pizzurno.jpg).

These provincial unions, often of different partisan sympathy, opposed the Menem government's educational policies and the Federal Education Act. Its national leadership also sought to co-centralized requirements to start negotiating with the central government. Once new labor relations rules were adopted for the public sector in 1990, it tried to combined capacity collective bargaining. However, in almost every province, CTERA competes with other unions. Rivals of the provincial unions and AMET, the UDA, and SADOP, opposed some of CTERA's strategies in conjunction with the private teacher union (Valencia, 2005). Consequently, CTERA has not fixed the sector's fragmentation, and more than 150 primary and education reform unions are presently at the state level. In addition to political diversity, teachers' unions differ significantly between provinces in political ideology, judicial recognition, and density.

6.2.3. Estimation of Union Influence

As previously stated, several institutional aspects of Argentina's school system and teacher unionization hinder the form of research offered in the United States, differentiated at the school or school district level. As a result, most research into the influence of unions is done at the provincial level. The connection between unions and their employers—in Argentina's case, provincial governments—is linked to the majority of the "intermediate" variables under study (i.e., budget allocation, tenure, and days missed).

As a result, the features of the unions, as well as their political ties with the provincial government, have an impact on these variables. The impact of union political alignment, legal recognition, coordination, and strength on the (intermediate) dependent variables under consideration is currently being studied. Strength: Both union density (teachers/members) and union participation (teachers who say they belong to a union) are considered. The traditional metric of union strength is membership or density, which boosts the impact of work stoppages and provides financial resources to the organization.

There is no evident link between strength and striking tendency. Strikes are frequently described as a result of asymmetric information, following Hicks' problem on the impossibility of understanding strikes when there is complete knowledge. Strikes can occur as a result of one of two sides' hunt for information. For example, the union may want to acknowledge how much the employer is willing to give up, while the employer may want to know the union's concession threshold.

Scholars characterize strikes as 'bluffing' by unions trying to get better terms than their actual power permits from employers. This lecture also corresponds to Hicks' conviction that the striking union is trying to maintain a "strong reputation." This scenario involves strikes when workers try to test the true power of the syndicate. This logic also predicts that there will be a less striking propensity to powerful unions which do not need to bluff and a greater propensity to weak, not bluff able, but higher, unions in the middle.

Strikes should be more likely in unions whose membership is declining and whose power is unknown but which nonetheless have a history of aggressiveness. The alternative view of strikes contends that union strength promotes collective action and increases the likelihood of a strike by enhancing the union's ability to achieve concessions through strike action. The relationship between union demands and union density (such as employment, budget allocation, and tenure) is simpler for the other

dependent variables; these are classic union goals. Stronger unions are better positioned to negotiate with the government on these problems, even when other legal and fiscal concerns are considered.

Some of the factors that may contribute to building a strong union include:

- **Coordination and Fragmentation:**

It's reasonable to believe that coordination becomes more difficult when more than one unit negotiates with the state government. Strikes are more likely when there is a lack of coordination, as it makes negotiating more difficult, especially if at least one of the unions is belligerent. In this instance, despite their weakness, each union is more likely to go on strike due to problems in coordinating discussions and their incentives to look more effective than their competitors in a sector where employees are dissatisfied with pay and working conditions. As a result, having many unions makes cooperation more complex and reduces bargaining power.

As a result, a monopolistic union is stronger than several competing unions in the same sector, all other factors being equal (e.g., rules, sector, density). As a result, monopolistic unions are more likely to receive what they want regarding employment, budget distribution, tenure, and even policy preferences for teachers. On the other hand, their demands or policy preferences may be the product of coordination challenges, which, when paired with differing political alignments, can radicalize teacher union positions on policy matters while also making negotiating more difficult (Verger et al., 2016).

- **Recognition:**

The legal status of the union is also taken into account. Personera gremial unions in Argentina have various unique rights, including organizing all workers in collective bargaining, enforcing labor society and legal protection laws, and cooperating with the state in coping with worker difficulties. As a result, it is assumed that in provinces where the main teacher union has a personera gremial, the union will have a better chance of getting its demands met.

- **Political Alignment:**

Golden states that the political affiliation of teacher unions may lead to a special proclivity by giving national attention and increasing the likelihood of strike-prone unions (1998). It

can also influence the Union's attitude towards the provincial government, based on the provincial and national dynamics, because of communication and faith channels built upon a long-term relationship, when past iterations have been beneficial for both parties (Murillo and Maceira, 2000).

This second thesis is based on the research on "power resources" (Korpi, 1978) and "political exchange" (Pizzorno, 1978), which suggests that when unions lacking political access to an ally state, they are more dependent on industrial resources, like strikes. As a result, significant policy alignment with the administration is projected to promote cooperation and rapport between the teachers' union and the administration, facilitating negotiating rather than strike action. It can also impact the views of union leaders and the establishment of preferences for policies with ambiguous effects, thanks to the political trust that has been built up.

The polar opposite is the lack of good political alignments. Interacting with a Peronist or conservative government in Argentina should enhance the striker's inclination to join CTERA (which rejected national Menem's policies).



Figure 6.6: What a Wave of Teacher Strikes in Argentina Can Teach Us about Learning

Source: <https://www.the74million.org/article/aldeman-what-a-wave-of-teacher-strikes-in-argentina-can-teach-us-about-learning-disruptions-degree-attainment-higher-unemployment-lower-earnings/>.

The interaction between political alignment and union fragmentation is also examined because unity monopoly induces negotiation and restraint

when political alignment fosters trust between the provincial government and the union.

Even though some unions have a strong relationship with the provincial government, the fragmentation of the union contributes to increased tension because opposing unions are afraid of being labeled “sold out” before teachers (Maceira and Murillo, 2000). The Index of Political Alignment was created with the diversity of CTERA union affiliations between provinces in mind and the existence of alternative syndicates with their political alignments. Other factors also influence the cost of striking and, as a result, the ability of unions to call for strikes. Attendance bonuses, particularly, affect individual instructor costs and will be employed as dependent variables.

- **Teacher Tenure:**

Teacher tenure has a beneficial effect on the achievement of students, according to the EPF results. The unions of teachers usually require tenure. The second most frequently expressed claim from CTERA after wages is “titularización” or “tenuring.” Because temporary employees are in a more vulnerable position regarding collective action rights and risks, unions seek tenure. As a result, tenures benefit temporary teachers and improve the homogeneity of union members and reduce the risk of striking, as they are often linked to job stability, making collective bargaining for unions easier.

- **Class Size:**

Unions in the public sector demand a larger workforce. Increased employment means a larger constituency to represent, which can strengthen the union, especially in a sector marked by job security and salaries determined by fiscal and political factors rather than productivity, as they are in tradable industries. Furthermore, to enhance the working circumstances of their members, teachers’ unions have long requested a low teacher-to-student ratio (Velázquez Barriga, 2020). The impact of their demand for increased employment in the education sector and whether increased employment results in a reduced student/teacher ratio is currently a source of worry. That is, if they want increased employment but also secure more favorable leave terms, or if new jobs lead to an increase in administrative posts, the student/teacher ratio may remain stable. As a result, the impact of labor unions on the effective student-to-teacher ratio is investigated.

- **Education Budget:**

Budget allocation to the education mentioned above function does not have a direct effect. The education budget, on the other hand, should have an indirect impact on the learning process. According to Hoxby (1996), whether unions perform a rent-seeking or a collective voice function, they are always expected to enhance the overall budget. Teachers' unions also have an impact on the budget, lobbying for increased compensation. As a result, strong unions should result in increased education budgets and salaries or, at the very least, a bigger allocation of pay in the education budget. The influence of the current union features on spending per pupil in each province, to examine their indirect effect on student achievement, is of special importance.

- **Job Satisfaction:**

Teachers' joy has a favorable influence on patients' performance, based on the current results of the innovation system. But what effect do unions have on work satisfaction? Unions are designed to enhance the working conditions of the members, who should thus be more satisfied with their jobs than non-union workers. On the other hand, most empirical research has discovered a negative relationship between unionized workers and job satisfaction. This outcome could be explained by several factors. It's vital to remember that job security is a personal characteristic that isn't always linked to an employee's "objective" workplace practices compared to others (e.g., poorer working conditions, lower wages).

6.3. BRAZIL EDUCATION LABOR UNION ACTION OF 2016

On September 22, thousands of teachers across Brazil went on strike to defend their salaries and working standards and oppose education budget reforms proposed by PMDB President Michel Temer (Brazilian Democratic Movement Party). It was the biggest workers' rally since removing the Workers Party (PT) President Dilma Rousseff last month.



Figure 6.7: The National Confederation of Education Workers (CNTE).

Source: <http://politeknik.de/p7077/>.

The National Confederation of Education Workers (CNTE) allied with the CUT, Brazil's main trade union organization, called the protests. The CNTE's call for labor action was joined by unions defending teachers and employees at federal colleges, resulting in a one-day strike on several campuses.

President Temer hopes to gain support in the National Congress before the end of this year for two new constitutional changes that will dramatically impact education as part of a larger campaign of assaults on the Brazilian middle class. The first, originally suggested by PT President Rousseff, holds current public sector pay and prohibits new hires for the next two years.

The other, proposed by President Temer, would cap social investment at the previous year's inflation rate for the next 20 years. Economists predict that it will reduce education spending by 60 billion reais (nearly US\$19 billion) over the next ten years, rendering the targets of Brazil's National Education Plan unsustainable (Vanegas, 2003). The National Education Plan, which was unanimously adopted by the National Congress in 2014, has 20 targets for the next ten years, including universalizing basic education and increasing education funding to 10% of GDP. There are currently 3 million Brazilian children and youth between the ages of 4 and 17 who are not attending classes.

Teachers opposed Temer's plans for pension "reform," which would raise the retirement age to 65, and labor reform, which included the prospect of workplace agreements being tied to hours served and efficiency, as well as increasing the working day to 12 hours. Temer's labor legislation further calls for direct arbitration between workers and employers to take priority over collective bargaining arrangements.

These "reform" plans are being advanced in the light of Brazil's worst economic recession since the Great Depression, with the economy contracting

for the second year in a row, inflation increasing, and the unemployment rate above 11%.

On September 21, Folha de Sao Paulo announced that 52% of wage deals in August were lower than inflation. Postal employees had ended a week-long strike the day before, on September 20, after agreeing to a 9% pay rise. Bank employees have been in a protest for three weeks and have also refused two offers from the National Banks Federation, the most recent of which was a 7% pay rise.

Cuts in actual pay and insecure job conditions disproportionately affect teachers who serve in the field with the highest education rate but the lowest earners in Brazil.

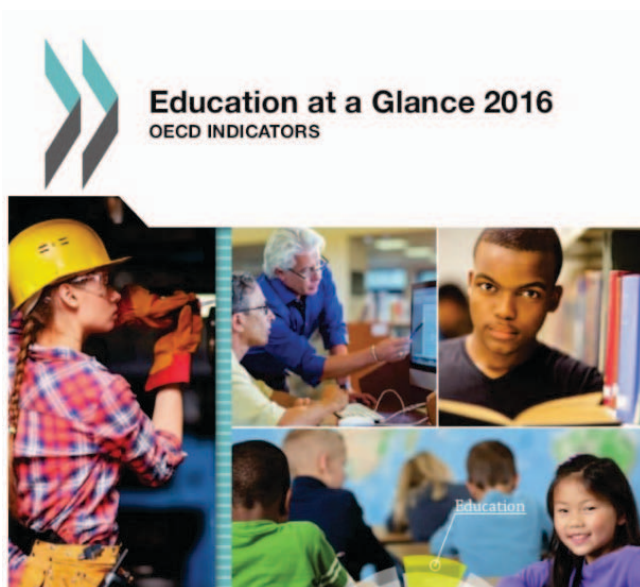


Figure 6.8: Organization for Economic Cooperation and Development (OECD) study “Education at a Glance 2016.”

Source: <https://www.slideshare.net/eraser/education-at-a-glance-2016-ocde-indicators>.

According to the Organization for Economic Cooperation and Development (OECD) study “Education at a Glance 2016,” Brazilian teachers earn 39% of the average salary of teachers from 41 countries, behind only Colombian and Indonesian teachers. It also revealed that Brazilian teachers perform the most in any country studied, with two weeks

more per year than the average. The biggest protest of the September 22 activities took place on Paulista Avenue in Sao Paulo, where 20,000 teachers assembled. The 180,000-member teachers' union APEOESP, which is allied with CUT, also arranged its convention there.

In recent years, teachers in Sao Paulo have faced two major problems. The first is the right-wing PSDB's performance-oriented scheme, which has replaced annual pay raises with incentives based on standard monitoring since 1994. Teachers in Sao Paulo have lost almost 17% of their actual income since July 2014, the date of the last salary raise. Governor Geraldo Alckmin has slashed the education budget for the second year in a row (Torres & Schugurensky, 2002).

Secondly, teachers in Sao Paulo have had a long history of APEOESP trading, including the assembly sabotage and isolation of the hardships of high-school teachers who last year occupied almost 200 schools with the restructuring scheme. In carrying out attacks on teachers and public education, APEOESP has worked closely with the state government.

The vast majority of remarks at the September 22 assembly focused on two big issues: The latest criminal lawsuit filed by state agents against former PT president Luiz Inacio Lula da Silva, accusing him of being the "maximum commander" of the Petrobras bribery system, and the need for a mass protest to counter the amendments.



Figure 6.9: President Temer.

Source: <https://www.dw.com/en/brazils-new-president-temer-unveils-austerity-measures/a-19280901>.

Despite President Temer's very transparent plans to launch attacks on the working class, the CUT was unable and reluctant to unite workers' struggles. In the last month, three main segments of the Brazilian working class have taken to the streets in protest: post office employees, bank workers, and students, all of whom are CUT members. Simultaneously, the CUT was unable to mobilize a larger mobilization in support of a general strike.

Workers' mistrust of labor is growing as the unions' interests' conflict squarely with those of the laborers.

6.4. THE BRAZILIAN NATIONAL CONFEDERATION OF EDUCATION WORKERS (CNTE)

The Brazilian National Confederation of Education Workers (CNTE) is rallying to block the closure of public elementary schools in January 2021 due to a shortage of funds. This Thursday, the CNTE is calling on its affiliates and educators worldwide to pressure the country's congress to vote in favor of renewing the Fund for the Maintenance and Development of Basic Education and the Valorization of Education Professionals (FUNDEB).

The fund, which was established in 2007 to protect money for public education, is set to end in December, and if it is not extended now, some 40 million students will miss school in 2021. Given the federal government's failure on this issue, as well as President Bolsonaro's continued cuts to the public education expenditure, CNTE insists that congress members take urgent action and vote to make the FUNDEB effective, guaranteeing access to free public education for everyone and fair working conditions for educators (Staab, 2010).

According to Heleno Arajo Filho, president of the confederation, Bolsonaro has shown a minor contribution to public education, and there is an increasing concern, considering the effects of the COVID-19 epidemic. According to Heleno, "the current sanitary crisis and subsequent social and economic recession make the grant extension an absolute emergency," as it is predicted that public schools will be forced to shut in over 1,000 cities. According to Fatima da Silva, General Secretary of the CNTE, "given the outbreak, we must unite online to ensure the right to education is upheld."

6.5. CRITIQUES OF SOUTH AMERICAS EDUCATION SYSTEMS AND UNIONS



Figure 6.10: Pursuit of Education in Latin America.

Source: <https://poelaeducation.weebly.com/>.

Latin American governments and people will go a long way toward delivering affordable education for all children by concentrating on three target fields. First and foremost, countries must focus on their efficiency and consistency. That involves deciding what students should understand, how well they should apply what they learn, and what tools are required to ensure quality outcomes. To put it another way, countries need a generally agreed set of material, output, and resource requirements. They must also track progress in meeting certain expectations daily and act accordingly when targets are not met.

Countries should pay special attention to pre-school and secondary education programs. Despite widespread recognition that early childhood development activities are crucial in laying the groundwork for subsequent schooling, nearly one of every three Latin American children of preschool age is not enrolled. Poor girls with fewer options for early learning at home have a much stronger need for better pre-school. In terms of higher education, fewer than half of students complete high school in many Latin American countries. Furthermore, most students graduate from high school without the skills they would require in the workplace, especially science,

mathematics, technology, English, and critical thinking. Second, countries must focus on education to assemble a league of exceptional educators: men and women who are enthusiastic about their work and have a good knowledge of their topics and the expertise and resources used to teach them. However, establishing the corps necessitates training (Schoenig, 2013).

According to a new study by the management consultancy firm McKinsey & Company, it takes an administration that chooses the finest and brightest teachers and leaders, develops and honors good teaching, reviews results, encourages continued professional development and progress, and eliminates unsuccessful teachers the classroom. In short, teaching must become a high-status career that both requires and honors excellence.

Finally, Latin American countries would invest more in disadvantaged children's schooling. The area is well-known for its high levels of income inequality. Inequalities in education both lead to and worsen this situation. If governments wish to commit to individual well-being and national economic development, employment, and social security, they would need to spend more on education for the vulnerable. This entails investing more in resources to meet the needs of vulnerable children (e.g., school nutrition and wellbeing systems, preferential cash grants or advanced degree programs that consider impoverished children's early entrance into the labor force, and additional assistance for troubled students). It also entails ensuring that a greater proportion of existing services hit the vulnerable. Since most middle- and upper-class households send their children to private primary and secondary schools, government funding at these levels is mainly directed toward the disadvantaged. However, high levels of public spending on higher education mostly favor the wealthy, while the vast majority of lower-income students do not complete their studies. Indeed, according to recent figures, more than half of government expenditure on higher education in Latin America goes to the richest 20% of the country. In comparison, less than 2% goes to the poorest 20%.

Advances in all three focus areas would certainly necessitate leadership and concerted commitment on states, educators, and civil society organizations alike. Although tangible measures like those suggested would not cure all social ills, they will go a long way toward improving Latin American schools.

Chapter 7

Educational Gender Gap in South America

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7.1. INTRODUCTION

Education is seen to be a vital prospect when it comes to dealing with social and economic development. It is further known to end world poverty as it can be easily seen that nations with higher average schooling tend to have been more successful in their economic paths. Overall, education is critical in the country, but there needs to be equal distribution among its citizens. One of the most considered dimensions is the one of gender. Looking at data worldwide, females are observed to attain low education levels compared to their male counterparts. Considering the nation's development, the gender gap is more advanced in developing countries than their developed counterparts. Due to this fact, strengthening education for the female gender is considered to be a strategic priority. Facts brought forward by researchers show that due to gender inequality, societies tend to have to pay a considerable price in terms of economic development.



Figure 7.1: Dealing with gender inequality in the classroom. In societies that are faced with gender, inequalities in their schools tend to face a lot of problems when dealing with the development of their country. As such, promoting gender equity is vital.

Source: Choma.

In most instances, it is seen that women tend to participate in labor markets and the returns from such are incredible. Therefore, it is no doubt that the participation of women in the education sector is fundamental in

ensuring economic development. It has strong social externalities. Research shows that when women participate in education, there is always a higher chance of reduced fertility which then causes lower child mortality rates and increases life expectancy. This is also an extended advantage of the intergenerational effects of education on mothers (Somers et al., 2004). Through education, others learn of the importance of nutrition, health, and wellbeing of the children. Empirical evidence describes the recognizable benefits of a mother's schooling on a child's education, unlike the impact a father's education has. With the mother's instruction, there are higher chances of better health, teaching, and adult productivity. In addition to this, studies also show that there are higher economic benefits or relatively higher rates of return in investing in women's education.

Even though there are loads of evidence describing the importance of equality in education in promoting economic development, most developing countries are lagging in encouraging female education. Sadly, most of their investment in education is mainly directed to the male gender. Researchers have even gone to the extent of showing how much increasing female education would benefit societies. However, it is observed that the objective of increasing female education is considered to be as old as the existing gender gap in schooling. To promote the teaching of the female communities, the international communities have made sustained efforts in trying to increase education for the female generation. This is most especially for the developing nations, and in ensuring the process goes through, it is part of the millennial development goals. Data from UNESCO shows an improvement in the number of female students attending school by the 1990s. Of the 153 countries that took part in the survey, 86 of them were seen to have achieved gender parity by the time. Of the 67 that remained, research showed that by 2015, only 18 of them could attain the same. Considering these numbers, we can conclude that by this particular time, more than 1/3 of the female girls in the world are not going to school. This is still a threatening number, and there is a need to work towards improving this number. The areas in which gender disparities are most pronounced include Oceania, Western Asia, Southern Asia, and Sub-Saharan Africa.



Figure 7.2: Young African girls need to be rescued from early marriages. Most girls in the sub-Saharan parts of Africa do not get the luxury of going to school as they have a duty to become wives instead of scholars. This is a practical example of the reason as to why most of the African girls in some regions do not have the luxury of going to school.

Source: America Magazine.

Initially, the South Americans had the same issue of not having the young girls not going to school. In the 18th century, for instance, the southern part of America had a different view on education. Unlike in the northern parts of America, the south could not access the educational infrastructure and facilities. It was not like the north, where the education system had revolutionaries until it started being normal. This was actually because of some of the cultural beliefs that the southern individuals had. According to them, the parents were required to take up the responsibility to educate their children. This included taking up roles such as teaching them the required morals and values to prepare them for the southern culture. At that particular period, the decree by the south of individuals was that it was illegal to educate the individuals that were working for them (Senechal, 2010). This included the slave, who mainly were individuals of color.

Furthermore, they considered it illegal to educate female children, as their role was to take care of the children and the homes to ensure good grooming. To make the situation even worse, the southern society leaders were specifically suspicious of the primers and leaders used by individuals from the northern parts. Given that it was a society where the leaders'

opinions were being respected and emulated, reformations in the education sector would seem nothing short of impossible. Furthermore, these readers were questioning the institution of slavery, which the people of the north wanted to continue.

In contrast with other regions such as Asia, Africa, and the Middle East, gender parity in education in correspondence to millennial development goals has been achieved. As a matter of fact, in the countries in this particular region, there is a reverse in terms of the gender disparity in the area. In the current society, women are seen to be achieving higher levels of education as compared to their male counterparts. This is quite an achievement and also more than the achievement of the sustainable development goals. With such improvements, individuals in the area can see the corresponding impact in developing the countries in the region. There has been an upscaling in their economic development. There are, however, some exceptions in the indigenous parts of the area. This is expected of the situation, given that individuals from the indigenous regions tend to be laggards, especially when it comes to corresponding to a particular norm (Ross Schneider, 2021). The indigenous communities of Bolivia and Guatemala were observed to be providing education to the male kids than the female gender. Well, this is expected. The outcomes that are surprisingly seen in this particular region are seen to contradict some of the famous sayings that parents tend to favor boys in terms of schooling over their female counterparts. Now the females are thriving in the education community, showing how much the parents advocate for equality in their homes by ensuring that the girls get as much attention as the boys in the education system. However, with the girls' success in the education system, one may even say that, in the current society, parents tend to favor girls more than boys when it comes to providing an education for their children.

Advances in the education of the female gender form one of the most successful stories in the region. This is something that is utterly celebrated as an outstanding achievement for the countries in the area. The sad part of this particular sweet story is that little is known concerning such significant and unprecedented achievements in this developing world. The issue of interest regarding this success story is that South America acts as a role model to most parts of the world, especially those who have not yet had a chance to achieve this success story in the education world. Individuals worldwide need to understand the various strategies used to ensure that such success is observed in every region worldwide. The question remains about some of the region's methods that aided in the beautiful success story. In

showing the exciting education in the area, various reports on the education outcomes of the region have gone even beyond addressing the absence of the gender gap in the region. Most researchers are stressing the rapid closure of the gender gap in most parts of the world, in which they get to suggest the importance of doing the same. There is little to no mention of the South American region. In most cases, what is addressed by such reports claim that talking about issues of gender inequality need not be handled anymore in some areas because of their success in attaining the same? Still, there has been lite concerning the South American region?



Figure 7.3: Gender inequality is a major issue in South America and is seen to get the attention of many individuals in the region. The only problem is that when it comes to progress regarding the declining gender disparity in education in the region, little is recorded. The region has made a remarkable success with regard to education, and currently, more females are seen to be schooling more than their male counterparts are.

Source: AIESEC.

Gender-based inequalities in all aspects are considered to be pervasive features in most, if not all, societies in the world. Such persistence in various dimensions in parts or rather multiple sizes shows that the disparities brought about by gender inequalities are closing up compared to other inequality. This is especially recognized in the education sector. With the advancements that are seen in the world today, it can be clearly said that the notions that individuals had in the past regarding education and how it was meant for

the male gender to have been reduced. The world is hitting hard, and life is becoming hard. As such, all hands need to be on deck about ensuring the economic development of a particular region. Unlike in the past, the population has been rising every day because, with improved medicine, there is a low mortality rate. In addition, there has been the industrial revolution, which is still progressing globally, hence the need for the advancement of knowledge to exist in the current cruel world. Also, the world is experiencing global warming, and as such most parts of the world do not necessarily farm, hence challenging to say that one can depend on own production for survival (Robert, 2012). With the increased use of machines, manual labor has been replaced, which means without unique knowledge and skills, there is no way someone may survive in this particular world. Individuals who had different notions regarding who should get a chance in education should not change. Every parent always wants what is best for their kids. It is not easy to find a male individual in the current world willing to be engaged to an individual who has not had an education.



Figure 7.4: Women are in the employment sector. Unlike in the past, women have also been able to take part in employment to form part of the working individuals. This is only attainable when they take part in education. With the current situation in the world and given the fact that the women form part of the pillars in their homes, educating them has become fundamental in the society.

Source: The Balance Careers.

To take care of a family in the present world takes more than one, unlike in the past where the men could take care of the entire family, including the wife in the family. This is not the case nowadays as if one assumes such a role in the current world; then they need to form part of the wealthy members of the society. Regardless of the wealth, such an individual would receive high amounts of stress and pressure, showing the need for the woman to take some form of charge in the family.

Apart from the decline in the closure of the gender gap, there has also been a reversal where most individuals that are seen to be attaining higher levels of education are the female gender. This modern is mesmerizing such that it has been able to form part of the most stylized fact in the history of current economic growth; it is seen to carry more implications given that human capital formation is a significant determinant of women's position in the socio-economic spheres. Such socio-economic spheres include those of work, family, and public life. In describing the major causes and consequences of education, the gender gap has triggered multi-disciplinary literature. Education forms part of our everyday life and is seen to affect most aspects of human life. Like education, gender disparity is considered a significant issue in most aspects, including politics, where the woman is regarded as one who faces challenges in such circumstances. The two or rather the conjunction of the two aspects is considered an essential aspect and a topic of discussion. However, it should be noted that despite the successes seen in this particular dimension, all is not well as there are still exit gaps that persist in specific crucial dimensions

7.2. THE DEEP ROOTS OF GENDER DISPARITY IN EDUCATION

Up to WWII, it can be summarized by saying that for most of the history of human beings, women have been seen to be undereducated compared to their male counterparts. This was especially seen in the patriarchal societies where parents were seen to invest less in their daughters than their sons. It can even be seen that there was the expansion of education for the male gender in early modern Europe. Education for female individuals was regarded as a privilege reserved only for the elite members of society. In most cases, they did not study in the same classroom or even do the same subjects as the male students (Ramírez Plascencia, 2018). The female students were confined to just doing specific topics aimed at grooming them to become better homemakers. In the past two centuries, there has been an expansion

in the education system with individuals observing mass schooling for male children, which later expanded to the female gender in the 19th century. It can be clearly said that in the eastern countries, Protestantism played an essential role in ensuring equality in the education system as it played a significant role in promoting female education. This was unlike most of the other religious denominations. By the second half of the 19th century, the decline in gender disparity was initiated with a steep rise in formal female education. This situation was first experienced in Europe and the United States. It was not only until later that the southern parts of the American continent caught up to that. It was, however, not an easy go given the fact that most of the south of beliefs were against educating the female gender.

7.3. CONTEMPORARY EVIDENCE OF EDUCATION

A variegated picture is instead being painted regarding the periods that followed WWII. Even though the disparities regarding gender inequalities are seen to be closing over the years, there still exists a sharp difference regarding the levels of education of individuals worldwide. At the primary level, most regions have been able to fill the gap of gender parity. However, there still exist disparities that tend to persist in the higher levels of education. Most countries, especially those in the OECD communities, have recognized a reversal of the gap in the tertiary level. This shows that most women are seen to be attaining higher education levels than their male counterparts. This is the case in the South American countries, which was a region that initially showed no hope of giving the female population a chance in attaining academic degrees. In the past few years, the number of females seen for achieving masters and doctoral degrees is rising predominantly and is progressing quickly. With the case of the developing regions, there have been significant improvements in primary education, which has been taking great charge, especially in Southern Asia and effective in North Africa, sub-Saharan Africa, and Western Asia.

When it comes to considering the generalized improvement in the education sector, it is not wrong to say that in the most marginalized regions, there is still significant gender disparities in terms of gender, given the fact that education for the female gender remains to be problematic (Poppema, 2009). The issue observed is that the female gender is seen as the last individuals to enroll in schools and the first to drop out of the same. Still, in developing countries, the issue is that the progress about the secondary and the tertiary levels of education has been taking place at different places in

different regions. There are those regions that are seen to be embracing the education system and, as such, ahead in the same with regards to disparities in the gender issues, while there are still those that are lagging due to some social and economic problems such as cultural beliefs and limited investments from outside investors.

With the case of other contemporary gender gaps, such as those seen to be existing in politics and economic opportunities, it can be easily said that all that could be linked to the theoretical disparities in the education sector about gender. This is seen as having deep historical roots. Holding a political position or being economically advanced, for the case of a woman, was seen as an abomination in pre-historic times. Given these facts, one can easily see that they are the drivers of the pre-war gender gaps existing up to date. This is easily observed because of what is described as an intergenerational process where the same beliefs are passed down from generation to generation and are seen to be persistently driving and exerting influence on society even after clearly stating that they have originated in pre-historic times. There are various incentives about everything that has happened globally, but still, the disparities are persisting. They are channeled through the workings of the family formation dynamics, labor markets, and cultural factors.

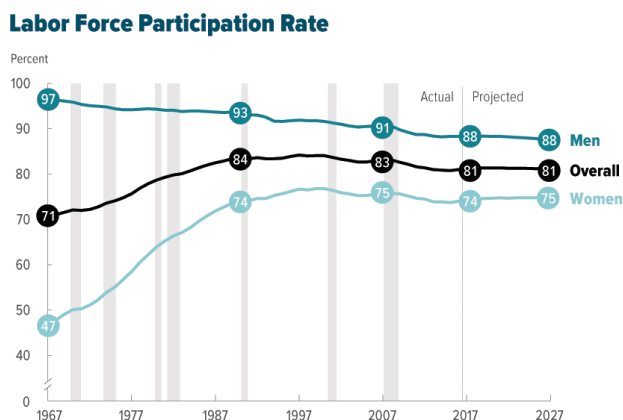


Figure 7.5: The labor force participation rate in the economy. The beliefs regarding the participation of women in various aspects is with no doubt arising eyebrows as it is seen to be channeled in various sectors, the labor market being one of them. The beliefs are however changing, because in years to come, the vice versa will be true and women will flood the labor market.

Source: Congressional Budget Office.

7.4. THE CURRENT SITUATION

There is a reason to smile, but there are still reasons to be concerned regarding gender disparities, especially in the education sector. The fact of the matter is that some of the key unresolved issues remain for the researchers and the policymakers to deal with them. In the developing world, huge disparities still exist in the education sector, especially when accessing education for women and literacy for adult women. For the case of the OECD countries, such as in South America, where women have been able to outpace the men in the education sector, the issue of gender disparities is persisting in other sectors such as employment, entrepreneurship, and politics. Some problems have still not been expressed, such as those regarding some of the visible discriminatory gaps against women regarding secondary and tertiary education. This is especially seen in the fields that the women are studying, leading to a lifelong consequence regarding the careers they venture into. This, in turn, affects their earning profiles because most of their occupations tend to be those of limited capacity. There is no doubt that women are underrepresented in the STEM departments, which are the fields that tend to have high employability and higher wages.



Figure 7.6: STEM role models to the female children. Over the years, there has been decline in gender gap in the education sector but still there is an issue regarding the representation of women in the STEM fields, which the areas are known to attract employment and better wages.

Source: *Women You Should Know*.

In most research, it is clear that in South American countries, the patriarchal societal structure and the family factors tend to have a tremendous causational effect on the educational gender gap that exists in the region. It is clear that both the family and the society play a significant role in this process and can be the many promoters of education for both genders (Patron, 2006). With an increase in the number of literate adult females, there will be a decrease in the gender inequality index and adjusted fertility rate and, in the long run, a decline in the gender gap that exists in the education sector. With literacy among adult women, there will be knowledge regarding ensuring that child mortality remains minimum and the importance of having a small number of children. In the process, the women will understand the importance of the girls participating in school and taking charge of rooting for their education. In the process, it would be easy to find an equal number of children attending schools.

It can be easily observed that the government's involvement in the education sector, especially when it comes to investing in education, tends not to impact the education sector, especially when dealing with the gender disparity that exists in the region of South America. In addition to this, policy implications do not change the differences that exist within the education system. For years and years, international communities have been able to hold conferences to try to combat the issues regarding the gender gap in the education system. With research, the international community's participation is crucial but may have little to no effect on the gender gap. Thus, the role of the families and societies ensures that the children get to have a chance in education regardless of their gender. The governments should thus reduce patriarchy and ensure that family factors have a better influence in helping combat gender disparities in South America.

7.5. PROGRESS TOWARDS GENDER EQUALITY IN EDUCATION IN SOUTH AMERICA

Education acts as a foundation for civic participation, and they are essential in shaping how children and young adults view themselves and others in society. The education environment is well managed with fairness; it becomes an area to foster gender equality and provide a safe environment for learning. In 1972, enactment number IX was passed to become federal law that guaranteed every individual have a right to an education free from discrimination based on sex. Since then, women have worked hard towards achieving equality in education.

It is encouraged that both boys and girls learn under the same roof to learn from each other, but there has been a significant step backward in that boys and girls are separated based on sex stereotypes. This is often justified based on pseudoscientific theories that explain how boys' and girls' brains function differently and learn. They explain that when boys learn together or when girls are kept and learn alone as a single-sex, they will know better.



Figure 7.7: Single-gender schools. They separate students based on their genders.

Source: My Essay Writer.

With this, the males and females are subjected to different teaching methods, which some educationists this is appropriate for each gender. This then shows the highest level of sex discrimination, and with this, it undermines gender equality. This shows how society is discriminating based on sex, and they simply deny it. Based on statistics, there are more male schools as compared to female's only schools. The individuals fighting for equality merely ask if the students are separated based on sex. Why are they not separated for the rest of their lives, and the society they are being prepared to enter has both genders. In this, it explains why individuals who come from mixed-gender education backgrounds are better at relating with people in the society as compared to individuals from one gender education background. Those who come from single-gender schools have been known to hold one perspective, and it is only that that favors their gender.

In the year 1995, just after the 75th anniversary of the 19th amendment of the constitution, which was about allowing women the right to vote, the then-first lady Hilary Rodham Clinton as she spoke in the United Nations

fourth convention for women she declared that “human rights are women’s rights and women’s rights are human rights.” The first was trying to advocate that women and girls should have equal rights and their male counterparts without any favor or discrimination based on gender (Payne et al., 2002). When girls are educated, it later contributes to an increase in their formal economic opportunity, increased wages, a decrease in pregnancy and early marriages, better-educated children when they bear their children, increased political participation, and a reduction in child and maternal mortality. When girls are educated, the spillover effects are numerous, including empowered and understanding their rights, healthy families, and an increase in a country’s economy.

In the American school system, male students, like female students, experience discrimination in their academic settings. Most of it is the way teachers discipline the male students and the attitude of their male fellow students. Recent studies show that teachers have some kind of bias towards male students, which affects them in the latter stages of their education. At the time of the American civil war, women entered the teaching profession, which enabled them to lead in this field. It led to women becoming more than men in the teaching profession. Many female teachers in the teaching profession made men think that male students would acquire feminine qualities. In the past, it was seen that many female teachers were enrolled in teaching students in the kindergarten stages as women were seen to be tender and understanding to the young children who were joining the school. It was seen as a female-dominated field, but in the recent past, more and more male teachers have been doing an excellent job in the early childhood education of young ones. This simply shows no specified job description based on gender as male teachers can teach kindergartens and females can run an entire school.

In STEM, males outnumber their female counterparts. STEM includes Science, Technology, Engineering, and Mathematics, and in all these, there are stereotypes, lack of science self-confidence, etc.; in this, women have been scarce, and this is due to a leaky pipeline, and this is seen when we notice that both boys and girls show equal interest STEM. At the early stages, both genders show interest, and this is good, but as they climb the ranks of education, the claims from females start falling while in males, it relatively remains constant. This simply means that many schools present their students with many paths through science education, and in this, if students have a negative influence, they are likely to choose a way that

is good and fit for them. When female students feel as if they are being neglected or sometimes even ostracized by teachers and sometimes by their peers for their passion for science, they look for an easy option. They end up transitioning out of STEM completely. In many studies, it has been shown that females can even be leading in the science class in front of their male counterparts, but an in-depth look shows they have high levels of anxiety and even stress. This simply indicates many females in STEM feel inferior to their male classmates. There is a need to close the gap between males and females in science, making progress. With this, legislation was passed, i.e., “the next space pioneers, innovators, researchers, and explorers women’s act” and “the promoting women in entrepreneur act.” It intends to encourage more women and girls to study science, mathematics, technology, and even engineering



Figure 7.8: A STEM summer camp. Students get the opportunity to carry out their projects.

Source: Chicago Architecture Center.

In recent years colleges and universities have been conducting outreach programs created and designed to mentor, encourage and recruit more females into the STEM program. With this progress being made, several ways in which they are being promoted include responding immediately with encouragement. People tend to believe that stem is highly competitive in society, and males have been more competitive than females. This isn't very objective simply by sexism compared to what is required, including

diligence, ingenuity, and work ethic. This simply means that this depends on skills and is not gender-based. Explaining and encouraging students to work hard and be disciplined in their learning will achieve whatever their minds have set up to achieve (Parra, 2009).

Never give them an option to choose between stem and family. Most women are the primary caregivers to their families; then, when given a choice, they will decide to take care of their families. However, this is more mental in that there are many females in STEM and they have great families with no problem related to or contradicting the fact that they do stem.

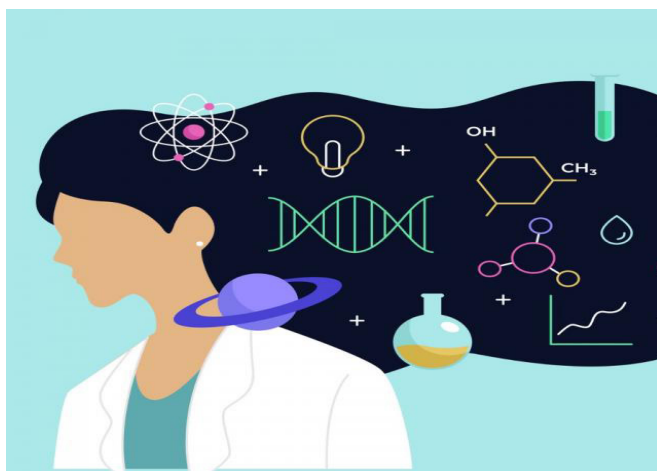


Figure 7.9: The participation of women in STEM. The belief that women should not participate in STEM or are not good at it is more of mental than a reality. In fact, there are those women that participate in STEM, and they get to take care of their families at the same time.

Source: Youth Are Awesome.

Use of authentic examples of women currently in stem and their success stories compared to just telling them. Many students need more than just encouragement to prove that they can be in a branch and be successful. The best way is to introduce them to an individual doing stem to give them their experience and even allow the learners to ask questions to discredit the myths, lies, and even doubts in what they may want to achieve.

Help them find role models in the stem; some women are in branch and have affected the world. Such women can be excellent role models to

become an inspiration to young students and motivate them to pursue their dreams.

Show them how stem impacts the world. Young girls and other individuals need to understand that doctors need medicine to treat illnesses, and scientists develop the treatment. On the other hand, politics also relies on STEM, as politicians mostly need to have a background in political science to help them in their endeavors. This gives young girls hope that by pursuing STEM, they are helping society and their communities in general and the world as a whole.

Give them experience; in reality, stem can be intimidating, which can sometimes be discouraging. With this, some students even question their compatibility. This may encourage students to attend STEM summer camp, an after-school club, a science laboratory tour, or even where they may want to work in the future. This may encourage them so that even though this might be challenging, there are some things they can be good and excel at and that not everything in STEM is difficult.

Help them narrow down what they want to do; STEM contains very many different fields, and when the girls are helped to narrow down for them to be focused on what they want to achieve and be inclined towards their interests. When teachers are teaching girls that like learning and discovery, then it helps to narrow down their focus, with this, the best way to help them narrow their focus is to expose them to many career fields. Encourage them to focus on their interests and encourage them to read and watch more videos on their interests (Nygren, 2016).

Help them develop and sharpen the skills they might need; the constant changes and innovations in STEM fields help them date with these innovations.

Encourage them to be involved in internship programs when they arise; with many workplaces requiring experience when applying for the job, the internship will come in handy. It also provides the learner with hands-on experience. This type of internship is primarily suitable for young girls in that it gives them hope that by the time they begin their college or university education, they will have the required experience and know the field they would want to work in.

Make the learning of stem fun; students, teachers, and parents all want good grades. This might take the students away from stem being fun; it then falls on the teacher to develop ways to ensure the subject is exciting and provides excitement for the learner. Coming up with experiments, helping

students in their stem projects, support them in their ideas of innovation just to encourage them. Visits to NASA, a Tesla factory, a giant pharmaceutical, etc., to show them how they look. A visit to apple can show them that stem is vague and fun as it is essential for new projects and innovations that they use and see in their day-to-day lives.

An essential part of education in the classroom is an important and integral part of the education system; a teacher runs it. Whatever they do and talk about in the school with their students has a long-lasting impact on the learners. There are ways in which teachers can help in progressing towards gender equality in American classrooms. Before looking at factors that may promote equality, several factors contribute to gender inequality. They include;

Most teachers pay attention to boys; in most cases, girls have received less attention, which might be because boys can call out answers even though the teacher might not have asked them to answer. With this, it causes the teacher, in turn, to observe and engage with them as it can be seen to be mischievous. This then can give the boys an opening to speak without permission. With time, this discourages the female students from speaking up even though they might be having a valid point to raise during the class discussion.

Interactions with boys are seen to be more public; teachers have been seen to interact at longer distances than when they are talking with girls. This is from the expectation that teachers need to speak with girls in a more nurturing way, and this makes it appear as if teachers are communicating more often with boys. This, in turn, encourages the girls to reserve their comments which then denies them a chance to participate (Mizala & Schneider, 2014).

Praising and criticisms are different for both boys and girls; in this instance, boys appear to be praised more than their female counterparts for sharing correct answers, and when boys provide a wrong answer, it is overlooked. On the other hand, girls are criticized for giving a wrong answer, and they are given less praise. From this, it can be seen that boy's knowledge can seem highly valued compared to that of girls.

To counter this, there are ways in which a teacher can encourage gender equality in their classroom. These include; the teacher should be reflective and objective, and the teacher needs to be aware of the world trends and do their best to offer more gender-neutral responses not to be offensive to either gender in the classroom. In some instances, teachers observe themselves

by recording themselves and reviewing it later. This, in turn, makes the individual aware of how they teach and how to improve.

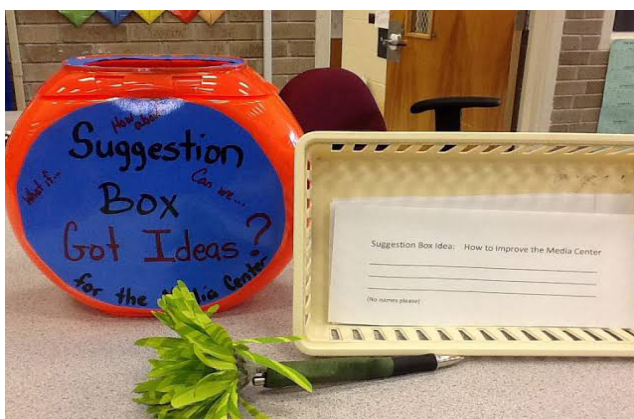


Figure 7.10: An example of a suggestion box. Used by students to convey their views anonymously.

Source: Pinterest.

Get feedback from colleagues and even students, have another teacher observe how you teach or record how you train to get feedback. One can also get feedback from students by using an anonymous suggestion box to get their views, comments, suggestions, or recommendations on how the teacher teaches.

Use gender-neutral language when appropriate; this can help students expand their perspectives beyond gender stereotyping. This can be by using examples such as a female contraction worker, a female soldier, a male secretary, a male nurse, or any other profession associated with a particular gender. The teacher can use gender-neutral pronouns to accommodate all this may lay a foundation for the learners not to limit their gender roles.

Seat and group students intentionally, with groupings, encourage the teacher to break up boys' or girls' cliques and encourage them to engage with each other. It enables them to exchange ideas and ideologies.

The use of project-based learning, when a mix of boys and girls are integrated within small group projects, makes them work together, and this helps them understand each other's behavior. When they work together, they end up understanding each other's strengths and weaknesses. With this understanding, they end uplifting each other up to get to their objective. This

helps the learners understand that roles are not fixed (Meade & Gershberg, 2008).

In South America, there are many ways the gender gap is being breached for each gender to be well represented. For some, the solution will most likely be more of societal and cultural change rather than policy change. In the current world, most of the problems women and girls face are more societal and cultural. These problems against women and girls begin when they enter kindergarten, where they start by feeling less talented than their male peers, which may persist until they finish their studies.

Some ways have been brought up to ensure that there is no gender bias in education, and this can be done through;

When the girls are identified and their achievements are recognized, they are recognized, then feel empowered. With this, the girls feel good about themselves, and this boosts their self-esteem and self-confidence. This makes them know they are good just the way they are and who they are, so they do not wish they were born a different gender



Figure 7.11: Celebrating a girl's identity. This is one way of boosting the self-esteem of the female gender in their education life.

Source: Lionesses of Africa.

Empowering girls to realize their dreams, they are encouraged to have goals at a young age, and they are helped by society to go for their dreams. They are also given the tools and knowledge they need to achieve their set goals. This will act as a stepping-stone for the girls to act as good ambassadors for gender equality and encourage the others that whenever they set their minds to something, they can achieve it. They can also be used as success stories in their school and even in their communities.

Meeting all the students' needs irrespective of their gender will address their particular needs and make them feel equal to boys. With this, teachers need to meet the needs of all students without sacrificing the education of others.

Giving girls a voice, the girls need to be given a voice to express themselves, and there needs to be an ear listening to their needs. This will encourage the girls to know that they can speak out and somebody is out there and listening to them. This will, in turn, encourage them to be outspoken and speak out about the ills in the school and society, and they might even come up with ways of correcting those ills.

Changing perceptions of people is the most significant way we can bring about gender equality. Changing how society perceives either gender is very important. When this change happens, it will lead to every child getting an equal opportunity. The girls feel oppressed mainly by society, and when society becomes educated, progress is slowly being judged. The number of girls joining and finishing school is increasing although it is yet to reach the achieved limit, it is encouraging.

With government funding and support, changes in society and the education sector will happen. In turn, the gender gap will reduce, and eventually, gender balance will be achieved, and every boy and girl will get the education each one of them desires and then complete their dreams.

7.6. GENDER DIFFERENCE IN HIGHER EDUCATION IN SOUTH AMERICA

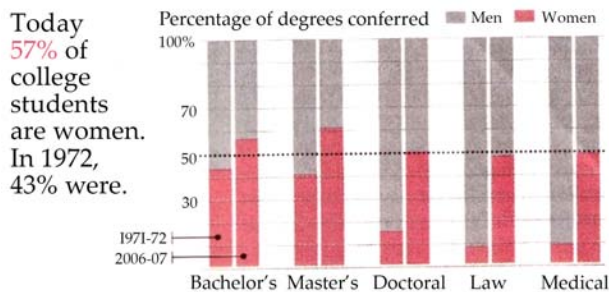


Figure 7.12: Gender inequality in higher education. This shows the disparities that exist in terms of the enrollment of students in higher education in South America.

Source: Research Gate.

From time immemorial, choosing and enrolling for a higher education degree and, consequently, selecting a line of work was and still is conditioned by personal attitudes and perceptions dictated by social and cultural factors. This has for a long time brought and shown significant differences in males and females in the education sector. The courses and subjects offered in higher education globally have been characterized by gender stereotypes, which continually attract more men to technical and technological careers, and or classes were as more women are drawn to teacher training and social work careers and courses in the course of their lives (Matos, 2016). The evidence is backed up by the fact that public sectors in most continents employ most women, such as teachers and nurses, which subsequently can be a factor for the wages gap between the two genders. Considering this certainty, the need to better comprehend the career choice of learners and how these options relate to the experiences they have in schools, specifically in the higher education institutions, arises.

According to the Euro stat, in 2015, women represented 54.1% of all higher education students in European countries. This percentage was slightly higher in the master's degree, where women were about 57.1%, and somewhat lower in the bachelor's degree of 53.2%. In the short duration programs, about 52.1% represented women. However, the majority of Ph.D. students are men, with a percentage of 52.2%. Almost a third of all the higher education students were enrolled in social sciences, journalism, information, management, administration, or the law. It was reported that there were more women than men in these specific courses. The second most common study area was engineering, industry, and construction, representing only about 15.8% of all students in higher education. In these programs, about 74% of the students were of the male gender, while only 26 % were of the female gender. Besides, health and social studies represented 13.1% of all students, of which 71.9% were women. In addition, educational programs had about 77.8% being women. Generally, women represented almost two-thirds of all the students in the arts and humanities area, and men about two-thirds of the students in natural sciences, math, statistics, and ICT. These differences between science, math, and humanities reveal an impact on career expectations between genders, even among students of similar performances in science and who reported the same level of enjoyment of science.

A study by Google has revealed almost similar results were the study highlighted factors such as social encouragement, which is characterized by positive reinforcement of family and peers, self-perception that is indicated

by their excellent performance in mathematics and by their interest in challenges and problem solving as an asset in a successful career in their lifetime, academic exposure factor which is measured by previous experiences with the area of computer science and career perception appeared significant in the choice of study programs in men and women at the higher education intuitions. Factors such as having a family member in a Computer Science-related field, having a family member with a Computer Science degree, and geography, were statistically insignificant (Manacorda et al., 2010). The student's self-perception and perception of careers and profession coupled with the societal expectations generally led to the choice of courses to attend to or specialize in the higher education systems. The study analyzed the perception that higher education students have about themselves and the degrees they have enrolled as well as more analyzes explicitly the gender stereotypes that persist within themselves and their perception about the assumed affinity between gender and areas and professions and found that there seems to exist an image of man and woman associated with some degrees and occupations. Although all students assume complete freedom of choice for enrolling in higher education degrees, the options seem to be determined by social and gender stereotypes and professional stability.

Significant sex differences in academic performance among undergraduate students at university institutions in Turkey were reported by several past studies. The main factors contributing to the differences included personal and household characteristics such as student ability, motivation, the quality of secondary education obtained, and the like. The gender of the student was a factor in determining student performance. According to Feingold's study, childhood training and experience, gender differences in attitudes, parental and teacher expectations and behaviors, differential course taking, and biological differences between the sexes may all be instrumental in giving rise to gender differences in achievement. The relatively high gender disparity in various spheres of public life and the patriarchal social structure in Turkey may also lead to more unsatisfactory academic performance among female university students. Thus, a difference in higher education between females and their male counterparts was evident.

In terms of educational attainment or achievement, women lag behind men in Turkey, which is in Europe. The 2000 Population Census records the illiteracy rate among men at about 6.1%, while women at about 19.4%. This shows that there is a remarkable difference in acquiring education by females as compared to men. Among the literate population, men's average level of schooling far exceeds that of women. However, there does seem to

be a faster improvement among the latter, as reported by Dayio and Tunali. In South America, the opposite is the case, where men lag behind women in Higher education.



Figure 7.13: Female students during their higher education graduation. In South America, unlike most parts of the world, men lag behind women in their higher education.

Source: Shutterstock.

Given that gender disparity in schooling is also observed among the younger population, where female school enrolment in primary and secondary education falls behind male children, this is thus likely to affect women's educational achievement at higher levels of learning. Despite the numerous studies that analyze the disadvantaged position of women as adults and children, there is almost no work on women's educational experiences as young adults. The scarcity of such work has been one of the motivations for this study. The other motivation has been our observation that female students often outperform their male counterparts in the undergraduate classes we teach. This casual observation contradicts the broad experiences of the female population as children and adults.

One of the earliest studies by Morris, referring to the psychic and social differences between sexes, claims that the education outcomes of men and women will, at least in part, be different at the collegiate and graduate level. They highlighted that women are less likely to achieve higher education

academic performances because of the societal expectations of their roles in the family. The functions include rearing children and taking care of the family, thus has less time to concentrate on their studies (Luque, 2017). The debate on gender differences in cognitive abilities has evolved from the discussion of biological vs. social determinism. The physical perspective on sex differences and cognitive performance considers social factors trivial or subordinate to natural elements like brain structure. In several of his studies, Lynn asserts that males have larger average brain sizes than females and would be expected to have higher average IQs. This is expected to affect their performance grades upon being issued with a test or examination.

Mackintosh, in the year 1998, on the other hand, claims that there is no sex difference in general intelligence. Mackintosh proposes that general intelligence should be defined as the sum of verbal comprehension, reasoning, and spatial abilities or defined as reasoning ability. The best measure of this is the Progressive Matrices. Examining two tests administered by The Israeli Defense Forces, which qualify as IQ tests, one of them, is an adaptation of Progressive by Matrices- Flynn finds no sex difference. Investigating academic performance at the pre-collegiate level by Lao finds female students obtain higher CGPA than males. Examining sex-related differences in classroom grades, a study by Kimball (1989) finds that in disparity to standardized mathematics achievement tests like SAT-M, female students outperform males in math classes. Other authors explain this pattern by stating that females tend to work more conscientiously and have a stronger work ethic than males. They also tend to have better language abilities, including essay writing skills, vocabulary, and word fluency, contributing to better course work.

A study conducted by Stage and Kloosterman noted that although gender differences in math achievement continue to exist on high cognitive level tasks at the high school level, such differences appear to be declining. Thus in the higher education intuitions, more females are selecting to pursue math-related courses. Young and Fisler examining SAT-M scores of high school seniors, find males to score better than females. However, they note that males generally come from households where the parent's socioeconomic status, as measured by the examinee's reported educational levels and income, is higher. In contrast, female test takers are more diverse and include more low-income students than boys. Others have argued that the content of the test or its administration favors males. Yet other researchers have explained the gap by adhering to such factors as differences in course-taking behavior, classroom experiences, and cognitive processing. The Standard Progressive

Matrices was constructed in the late 1930s to test non-verbal or abstract reasoning ability. The Advanced Progressive Matrices was built in 1947 as a more complex version of the test suitable for higher ability ranges.



Figure 7.14: Gender inequality in higher education.

Source: Medium.

The studies conducted outside of the US present differing outcomes, Younger, Warrington, and Williams, focus on the gender gap in English schools. Their analysis is based on the performance of boys and girls in GCSE examinations in the UK, and girls are found to get better grades than boys do. Boys' disregard explains this phenomenon for authority, academic work, formal achievement, differences in students' attitudes to work and their goals and aspirations, and girls' increased maturity and more effective learning strategies. Baker and Jones analyze sex differences in the eighth-grade math performance of over 77,000 students in 19 developed and developing countries. They find no evidence of a significant gender gap. Both cross-national variations in sex differences in mathematical performance and the trend toward less of a difference between males and females question any innate male superiority in intelligence. The study finds that gender differences in mathematics achievement are statistically insignificant in all countries but the Czech Republic. Male have from time to time emerged victorious in mathematics-related programs at the university than their counterparts.

In science, gender differences favor males and are often statistically significant except for five countries, including Turkey. In higher education, women are usually found to outperform men. Hyde and Kling state this to be the case irrespective of the measure of success used. Betts and Morell

report that sex remains a significant predictor of CGPA after controlling for various individual attributes such as ethnic background SAT scores, and the high school attended. Similarly, investigating about 60,000 students from 22 public research universities, Kim, Rhoades, and Woodard found that SAT scores significantly impact student graduation. However, gender is a more powerful correlate of graduation at the individual level than the SAT score (Lustig et al., 2013). Women are also found to obtain better grades than would be predicted from their SAT scores. Many researchers claim that a large part of the under-prediction derives from the difference in course-taking patterns of male and female college students. Ruling out differential course selection to explain the under-prediction of female grades, Leonard and Jiang suggest that females have better study skills than male students do. Other researchers have argued that women receive higher rates than men because they work harder and attend class more frequently. Investigating success in terms of course grades, Bridgeman and Wendler find that women typically had equal or higher math classes. On a sample of 62,000 students, Wainer and Steinberg conclude that although women had lower SAT-M scores, they received similar grades from first-year math courses. Cohn conversely finds gender to be an insignificant determinant of success in macroeconomics courses.

The literature survey on gender differences in educational performance at different levels indicates mixed results. However, one common finding is that females outperform their male counterparts in higher education. In what follows next, we shall try to see whether this is also true for Turkey. The education system in Turkey and at METU The formal education system in Turkey includes primary education, secondary education, and higher education institutions. Primary education is compulsory and lasts for eight years.

On the other hand, secondary education comprises public, technical, and vocational high schools. Public high school education lasts for three years, while technical and vocational training may extend to four years. While the former is geared more toward preparing students for tertiary education, the latter aims to equip students with marketable skills for immediate employment after graduation. The curricula of vocational and technical schools differ depending on the type of vocational training they offer. The seven curricula of public high schools may also differ from each other.

In contrast, some schools emphasize mathematics and sciences in their teachings. In others, the emphasis is on foreign languages, with the medium

of instruction being in a foreign language. A significant proportion of these specialized public high schools admit students through a centralized exam. The overwhelming majority of primary and secondary education schools (including the technical high schools) are public and free of charge. The parents are expected to meet various school expenses such as books, school supplies, commuting fees, etc. The proportion of the student population enrolled in private primary and secondary schools is limited to 1.5%.



Figure 7.15: Students in a classroom. When joining high school, students need to take tests in order to ensure that each student gets a chance in education.

Source: The Friends Central School Blog.

Higher education admittance to higher education is through a central examination managed by the Student Selection and Placement Center. The university entrance exam is given once a year, and over 1.5 million high school graduates take it annually. The applicants get placed into the departments and universities of their choice depending on their placement score, which includes the examination score and the high school CGPA of the student. Medical schools and engineering departments are usually high in demand requiring top scores. At the other end of the spectrum, there are open-university programs that require much lower scores for admittance. The scores of more established 8 universities are also comparatively higher. Although there are 53 public and 24 private universities, 4 scattered around the country, a vast difference in the quality of higher education offered causes excess demand for more established universities (Knoeppel & Brewer, 2011). Every year, roughly one out of ten applicants get placed into a four-year program. An additional 20% are inducted into Open University or two-year programs. The success rate is slightly lower for the first-time applicants (44%) who often take the exam several times before getting placed. The

problem associated with not being placed into a program of choice lies in the imbalance between the demand for and supply of higher education. Despite the high demand, limited capacity causes university graduates to constitute a small proportion of the population. Among the adult population, those with higher education, inclusive of Open University, is limited to 6%. This figure is lower for women, recorded at 4.9%.

The university entrance exam has taken on such paramount importance in the lives of young people that many devote a good part of their last two years in high school preparing for this examination. The struggle starts earlier in trying to get into a high school that is reputed to succeed in getting the most significant number of students placed in prestigious universities. However, the struggle hardly ends there. Besides following the high school curriculum, students attend specialized private courses geared toward preparing them for the university examination during their high school years. The cost of such private classes is often relatively high. The result is that the chances that a young adult of modest background will enter a highly competitive university are rather slim.

Students obtain credits from the courses they take, and graduation is conditional on obtaining the required amount of recognition from a minimum number of studies within a maximum of 14 semesters. Being a public university, the tuition fee is relatively low, ranging from \$240/year in the Faculty of Education to \$650/year in the Faculty of Architecture. However, five students who do not have the financial capability of meeting the minimum fees can apply for various types of student grants. In this sense, METU is open to students with diverse socio-economic backgrounds, provided that they manage to get through the highly rigorous or costly selection process described earlier. METU University in Turkey, being a good representative of most American universities, is a well-reputed university that attracts students from all over the country through the main crux of the student body comes from Ankara and western provinces. The proportion of students coming from the east and southeast, which are relatively more impoverished regions of the country, is limited to less than 5% of the student body. Women's representation in higher education across the world is increasingly approaching parity with men. At METU, female students constitute 37.4% of the student body, which is lower than the average (43%). Suppose one possible reason for the lower share of female students at METU is its engineering character. In that case, the other might be the relatively more unsatisfactory performance of female students in the placement exam. We address the latter point in the following sections of the paper. The medium

of instruction at METU is English, so that before the students are admitted to their respective departments, they need to pass an English language test. If their background in English is found to be unsatisfactory, they enroll in preparatory school. Progression to departments requires receiving a passing score in the language test.

In conclusion, according to past studies done, girls perform below compared to their male counterparts. They are more likely to avoid pursuing science or math-related programs at the higher levels of education. This conversely affects their career and employment placement in their later life and their associated incomes.

Chapter 8

Trends in Distance Education in South America

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8.1. INTRODUCTION

Documents have been written since the dawn of time to expose global trends and threats. They act as a reflection of the past, present, and future. Distance education was created in reaction to the need to have education for those who would otherwise be unable to attend face-to-face classes. It includes services that enable the learner and teacher to be physically apart during the learning process while also maintaining contact in various ways. That is why, up to this day, most scholars had many content assessments, citation analyzes, and surveys of education topics.

On the other hand, distance learning has been one of the most common forms of education in the last decade. It is a reality that the greater the economic opportunities, the greater the technical possibilities, the more interactive universities there are, and the more researches there are. They're both linked and interconnected (Angell, 2002). With fair access to education, these countries will have more opportunities to contribute to the growth of global awareness. In this way, technology is assisting in closing the educational gap between developed and emerging countries. Scholars would bring attention to the most recent technological advancements in education for countries to see their horizons for more significant achievement.

Distance learning, also known as distance education, e-learning, or online learning, is a form of education in which teachers and students are physically apart during teaching. Different tools are used to promote student-teacher and student-student contact. Non-traditional students, such as full-time employees, service employees, and non-residents or people in rural areas who cannot reach classroom classes, have historically benefited from distance learning. On the other hand, distance learning has become a well-established feature of the educational landscape, with patterns indicating that it will continue to expand.

In the fall of 2009, more than 5.6 million university students in the United States were registered in at least one online program, up from 1.6 million in 2002. A growing number of colleges now offer distance learning programs. The University of Phoenix, which was established in Arizona in 1976 and had grown to become the world's largest private school by the first decade of the twenty-first century, with over 400,000 enrolled students, is a leader in the region. While many of its students spend a bit of time in classrooms on one of its thousands of campuses across the United States, Canada, and Puerto Rico, it was one of the first to introduce distance learning technology. While many of its students spend some time in classrooms on

one of its thousands of campuses across the United States, Canada, and Puerto Rico, it was one of the first to introduce distance learning technology. While a precise figure for international admissions in distance learning is inaccessible, the enrolment at two of the largest public universities that extensively use distance learning approaches gives some inkling: The Indira Gandhi National Open University, headquartered in New Delhi, had an enrolment exceeding 1.5 million students in the early twenty-first century, and the China Central Radio and Television University, based in Beijing, had an enrolment above 1.5 million students.

Distance learning is shared with students and institutions for a good reason. Universities benefit from the ability to add students without needing to build classrooms and accommodation, and students benefit from the flexibility of working when and where they choose. Specialty activities, such as small-enrolment languages and Advanced Placement programs, are available in public schools without many classrooms. Home-schooled students also have access to centralized teaching.

A variety of names has referred to the concept of distance learning. Distance education is described as the combination of distance learning (the student's activity) and distance teaching (the teacher's activity). Digital learning generally refers to classes taken outside of a classroom by primary or secondary school students (and often commonly using the Internet); correspondence instruction, a long-standing system in which individual teaching is delivered by mail; and open learning are all examples of common variants.

Distance learning is distinguished by four attributes. To begin with, distance learning is often conducted by institutions; it is not self-study or a non-academic environment. The organizations may or may not have conventional classroom-based education, but they are qualified for accreditation by the same agencies as those that do (Keen & Haynes, 2012).

Second, distance learning necessitates spatial isolation, and time can also divide students and teachers. This style of education has many benefits, including accessibility and ease. Students' intellectual, linguistic, and social gaps can also be bridged by well-designed services.

Third, immersive telecommunications establish contact between members of a student community and the instructor. Electronic correspondence, such as e-mail, is more commonly used, although older modes of communication, such as the postal system, can also be used. Interaction is central to distance education, as it is to all teaching, regardless of the medium. As messaging

networks become more advanced and readily accessible, learners, students, and educational services become less reliant on physical proximity; as a result, the Internet, smartphones, and e-mail have led to the exponential growth of distance learning.

Finally, distance education, like any other type of education, creates a learning environment of students, instructors, and educational resources—books, audio, video, and visual displays that enable students to access instruction material. The concept of group building is promoted through social networking on the Internet. Users create accounts on sites like Facebook and YouTube, recognize members (“friends”) with whom they have a bond, and form new groups of like-minded people. In a distance learning environment, this type of networking will help students communicate with one another and feel less alone.

In terms of a student’s or teacher’s physical appearance, distance education is distinctly distinct from traditional education. So what exactly does it imply?

It translates, for the most part, into more independence for both learners and instructors. Still, it also necessitates greater levels of discipline and preparation to complete the course of study effectively.

The idea that students can select classes that suit their schedules and resources exemplifies the increased flexibility of remote learning. (Teachers, too, should do this.) Students should also pick the venue and instructional methods that better serve their needs regarding digital learning.

8.2. SOUTH AMERICA TRENDS, INITIATIVES, AND PROJECTS GEARED TOWARDS DISTANCE EDUCATION

In looking at facts concerning distance learning, most research that has been done examines South America (geographical in context) in conjunction with its Latin American (cultural in context) neighbors (especially those done by verifiable bodies like OECD and UNESCO). This chapter will analyze some of these statistics as a frame of reference to understand distance learning in South America.

South America is located in the western hemisphere, with the Isthmus of Panama connecting it to Central and North America. Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Guyana, Paraguay, Peru, Suriname, Uruguay, and Venezuela are the countries that make up this continent.

According to the United Nations Development Program (2007), they are all developed countries with a complex socioeconomic reality due to political and economic crises in their histories. In Latin America, distance education has a long and diverse history (Hutt & Polikoff, 2020).

The primary metrics for South American countries indicate that their average gross domestic product per capita is 3 to 30 times smaller than that of developing countries.

Despite the continued development in access to information and communication technology, only 13.99% of the South American population has Internet access, with an average DOI (digital opportunity index) of 0.39, a performance growth rate of 479% between 2001 and 2002, and an Internet usage growth rate of 374% between 2000 and 2007.

Multi-ethnic, multicultural, and geographically dispersed nations create a divide, or social imbalance, between urban and rural populations; as a result, states, as well as international organizations and non-governmental organizations, have been experimenting with various technologies to expand access to education minimize poverty.

At the turn of the century, South American countries have been interested in distance education. Government-managed, privately financed, divisions from public or private universities, and controlled and supported by non-governmental organizations, or a combination of these, have both been used in the introduction of distance-education programs, with the aid of foreign agencies such as the Catholic Church, UNESCO, The World Bank, UNDP, and FAO. As in the rest of the world, any kind of technology has been used as a delivery mechanism, from postal services to Web services.

International Schools, a US educational institution, began selling correspondent classes from a local branch in Rio de Janeiro, Brazil, in 1904. In 1923, one of Latin America's founders of distance education, Edgard Roquette Pinto, establishes the Radio Sociedade do Rio de Janeiro (Radio Society of Rio de Janeiro, later renamed Radio Ministry of Education) with the goal of "giving some education, teaching, and pleasure to every area." In the Andean mountains of Colombia, where 80% of the population was illiterate, clergyman (later monsignor) Jose Joaquin Salcedo founded Radio Sutatenza in 1947.

Country	Population (millions)	GDP (gross domestic prod- uct) per capita in 2004 (U.S. \$)	Telephone Lines (per 100 inhabitants)	Cellular Mo- bile Subscribers	Internet Users	Personal Com- puters in 2004	DOI
Argentina	38.59	4,007	24.47	57.41	17.78	9.07	0.47
Bolivia	9.18	967	7.04	26.37	5.23	2.33	0.30
Brazil	186.40	3,278	21.38	46.25	17.24	16.09	0.42
Chile	15.59	6,166	22.04	67.79	28.93	14.75	0.52
Colombia	45.60	2,152	16.84	47.92	10.39	4.15	0.38
Ecuador	13.23	2,295	12.7	47.22	7.32	6.55	0.36
Guyana	0.75	1,051	14.66	37.45	21.3	3.86	0.29
Paraguay	6.16	1,018	5.2	30.64	3.25	7.47	0.30
Peru	27.97	2,513	8.05	19.96	16.45	10.01	0.39
Suriname	0.45	2,484	18.04	51.82	7.12	4.55	0.33
Uruguay	3.25	4,078	30.95	35.54	20.55	13.27	0.43
Venezuela	26.75	4,164	13.48	46.71	12.37	8.19	0.43
S o u t h America	373.92	2,848	16.24	42.92	13.99	8.36	0.39

Figure 8.1: South American countries' basic indicators.

Source: <http://what-when-how.com/distance-learning/trends-in-distance-education-in-south-america/>.

Salcedo's goal of "assisting people in their self-development" has been realized for more than 40 years. When the initiative ended in 1989, it had circulated 10 million books and educated 25,000 rural leaders and 8 million residents in primary education, health, and farming techniques. Radio Sutatenza served as a blueprint for distance-education programs in Asia, Africa, and Latin America during its lifetime.

The establishment of Radio Sutatenza by Accin Comuntaria Popular in 1946 marked the beginning of real practiced distance education in Latin America. Adults received correspondence and radio-based instruction through this initiative, which foreshadowed the introduction of the Latin American radiophonic school model. Radio schools were established in almost all regions, particularly in Argentina, Brazil, Colombia, Costa Rica, Guatemala, and Mexico, with government and Roman Catholic Church support. They were crucial in rural community education and growth, as well as basic schooling.



Figure 8.2: A class running on Radio Sutatenza by Acción Comuntaria Popular.

Source: <http://thecitypaperbogota.com/culture/a-remembrance-of-radio-schools41511/8770>.

Acción Cultural Popular, which ran from 1974 to 1998 and used educational radio, books, pamphlets, and maps to offer basic mathematics, reading comprehension skills, as well as community growth, health

education, child care, and agricultural skills to Colombian villagers and their families, was a wildly successful initiative. Basic adult education and primary school equivalency programs were offered at a low cost. It served 150,000 students in 22,000 radio schools at its peak. The groups were headed by monitors who directed the debate. When church and government funding was withheld, ACPO died after 40 years. Some radio colleges, on the other hand, continue to do meaningful work.

The Catholic Church founded Panamericana Teleducacion, the first telescuola (teleschool), in 1961 in Lima, Peru's capital city, using television programs to supplement formal education. Manuel Benavides establishes The Instituto Nacional de Teleducacion, INTE (National Institute of Teleducation), a government-sponsored organization tasked with organizing and promoting Peru's burgeoning radio and television distance-education programs three years later, in 1964. INTE developed and produced entirely instructional television series for Peru until 1990 and assisted in establishing similar institutions in other Latin American countries (Arrueta & Avery, 2012).

About 1985, the Roberto Marinho Foundation in Brazil created Telecurso 1º Grau (Telecourse First Grade), which served as a feasibility study for Telecurso 2000, the world's most significant pre-tertiary distance-education initiative. It was developed to improve out-of-school students' preparation for government exams in primary and secondary education. Telecurso 2000 is a simplified version of a high school-specific curriculum delivered by direct television, videotaped classroom sessions, and books.

While it is impossible to estimate the number of Telecurso 2000 subscribers, since its inception in 1995, 5.2 million texts have been sold, 7 million Brazilians have viewed the workshops daily, and 200,000 previously registered students in 1999.

A number of open universities were established in the 1970s and 1980s, following the model of the United Kingdom Open University: In Colombia, the Universidad Abierta (Open University) was established in 1972 as a subsidiary of the Universidad Javeriana; in Ecuador, the Universidad Tecnica Particular de Loja (UTPL) was founded in 1976; and in Venezuela, the Universidad Nacional Abierta (UNA; Open National University) was founded in 1977.

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Índios caçados como animais
 Na aula 6.ª de História
Macacos enlouquecem cientista
 Na aula 6.ª de Língua Portuguesa

Enchente passa e perigo fica
 Página 2

Figure 8.3: Disclosure of the Telecourse.

Source: <https://materialpublic.imd.ufrn.br/curso/disciplina/2/71/2/5>.

In 1980, the Universidade de Brasília establishes the Universidade Aberta do Brasil (which was discontinued in 1984 and replaced by the Coordenadoria de Educação a Distância, CEAD); and in 1981, Colombia establishes the Unidad Universitaria del Sur de Bogotá (UNISUR) (in 1997 it was renamed Universidad Nacional Abierta y a Distancia, UNAD). Other notable universities with open and distance learning programs include Colombia's Universidad Santo Tomás de Aquino and Universidad de Antioquia; Chile's Pontificia Universidad Católica de Chile, which founded the Centro de Educación a Distancia TELEDUC in 1977; Colombia's Universidad Militar Nueva Granada; and Ecuador's Escuela Politécnica del Ejército.

The last two are examples of distance-learning encounters with each national military. In 1987, Argentina's Universidad Nacional de Mar del

Plata became the first university in Latin America to offer a full virtual curriculum. Until 2004, every country in the region had virtual education programs in higher education, with the exception of Suriname, Guyana, and possibly Paraguay.



Figure 8.4: National University of Mar del Plata.

Source: <https://free-apply.com/en/university/1003200044>.

8.3. MORE CURRENT INITIATIVES

Since 1992, several South American countries have improved access to information and communication technology, teacher training and certification, computer-based learning integration into national curricula, and the number of schools connecting to the Internet. As a result, ambitious initiatives such as Enlaces in Chile in 1992, Proinfo in Brazil in 1997, Huascarán in Peru in 2001, Fundabit in Venezuela in 2001, Educe in Argentina in 2002, EducarEcuador in 2003, Todosenred in Uruguay in 2003, Colombia Aprende in 2004, Paraguay in 2005, and EducaBolivia in 2007 were initiated as national primary and secondary school systems (Gvirtz, 2002).

Interactive Radio Instruction (IRI) and school radio programming are also aimed at enhancing learning and teaching in the classroom and were introduced and adapted wholesomely across Latin America. The Radio Mathematics Project in Nicaragua used IRI for the first time from 1974 to 1979. About the fact that IRI programs have seen inconsistent outcomes in terms of national adoption and long-term viability, there are some fascinating

math projects in Bolivia and Venezuela. In Bolivia, the IRI-based Preventive Health program (PARI) has significantly improved children's awareness, attitudes, and behaviors.

A total of 125,000 students in 69 schools were reached by the transmissions. TV Escola is a Brazilian school TV service operated by the Ministry of Education's Secretary of Distance Education. Some airtime is dedicated to instructor and principal in-service preparation, while the remainder is devoted to programs that facilitate classroom instruction. Each program is three hours long and is broadcast four times a day.



Figure 8.5: TV Escola is a Brazilian public broadcasting television network created by the Ministry of Education of Brazil in 1995. First broadcast in 1996 in a nationwide transmission, it airs exclusively educational programs.

Source: https://tvescola.org.br/tve_noticias/tv-escola-no-big-festival-games/.

The mission, which began in September 1995 and now spans all of Brazil, was launched in September 1995. Any school with more than 100 elementary students is entitled to qualify for funding from the National Fund for the Development of Education (FNDE) to purchase the “technological package” needed to download and document programs distributed by the Brasilsat satellite and by 1999, 38,846 schools had requested assistance.

Universities in the area began to develop distance education departments in the 1970s to reach out to vulnerable communities. Colombia's Universidad de La Sabana, for example, started providing distance learning courses in 1975. Any of these programs are intended to help students prepare for university.

The University of Guyana's Institute of Distance and Continuing Education provides remedial English and mathematics courses through its Pre-University Program. Others were built to provide university-level education to people who live far away. The dual-mode university is the

most common trend, with several colleges providing distance education programs. For example, the Universidad de La Habana in Cuba started its distance education program in 1979 and now has 7,000 students enrolled in various degrees. The Universidade Federal do Rio Grande do Sul in Brazil has 15,000 distance learners.

Since the early 1900s, Brazil has used distance-education programs. Proinfo connects over 6 million individuals in primary and secondary education, 84,713 students in virtual higher education, and several business colleges through e-learning educational programs (Hooker, 2005).

In Argentina, virtual-education programs are offered by 70% of universities, with 17,657 people registered. The Universidad Virtual de Quilmes, the Universidad de Buenos Aires, the Facultad de Cs. Economicas (Cordoba), and the Universidad Tres de Febrero all offer major digital programs. Colombia has 8,059 virtual higher education students and provides 446 open distance higher education programs for over 200,000 students, including CRECE Virtual School, promoting education in rural and urban areas. The Higher Education Regional Centers provide higher education to 10,297 rural students.

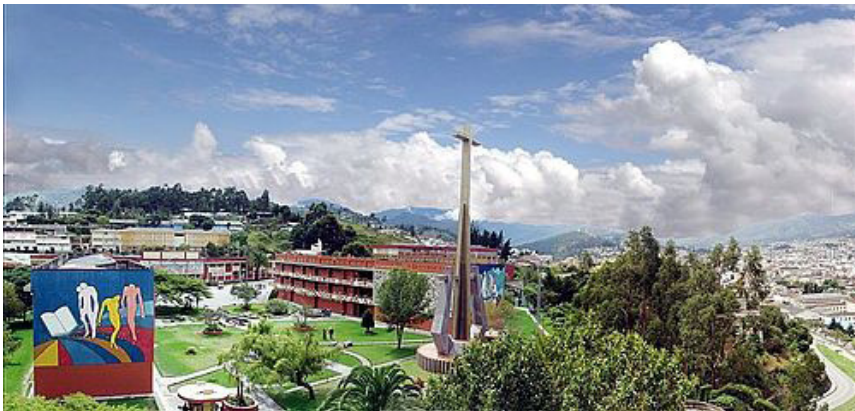


Figure 8.6: Technical Particular University of Loja, Ecuador, South America headquarters; panoramic view.

Source: https://www.wikiwand.com/en/Universidad_T%C3%A9cnica_Particular_de_Loja.

The Fundabit initiative in Venezuela is expanding the exposure to information and communication technology for over 500,000 citizens, and interactive programs are available in 38% of the country's universities.

In 2006, Ecuador had 28,248 distance higher-education graduates, with the Universidad Tecnica Particular de Loja (UTPL) having over 25,763 students enrolled in distance education programs.

Peru is constructing Huascarán, a national primary and secondary school network, to integrate computer-based learning into urban and rural schools and provide Internet connectivity to seven million students by 2010.

Several universities, including the Universidad Garcilazo, the Universidad San Marcos, and the Universidad Catolica del Peru, offer distance-education programs, primarily in teaching degrees and post-secondary studies. While the virtualization of universities is still in its infancy, there are projects such as the Consorcio de Universidades, a joint ventures university, and the Universidad Virtual, a division of the Universidad San Martin, which offer short technical courses through the Internet. As a result of the introduction of community cabins, Internet usage has steadily increased over the last seven years.

The Peruvian Science Network launched a project that an hour of Internet access costs less than \$0.30. According to officials, this dense network of metropolitan cabinas publicas is unrivaled anywhere else in the country.

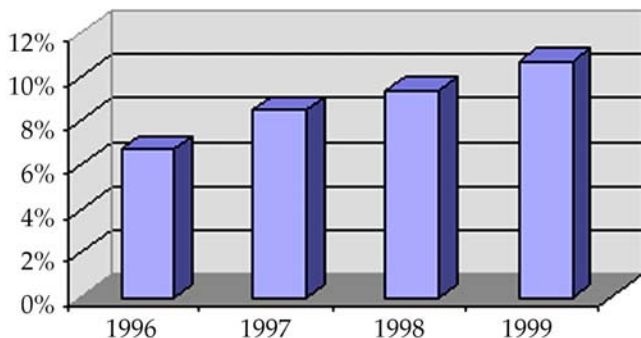


Figure 8.7: The infrastructure for Peruvian telecommunications has greatly improved over the last 10 years due to a phase of privatization and growth in the Peruvian telecommunications industry. In 1994, the government's telecommunications network was formally privatized. At that time, Telefónica has built more than 2000 miles of cable television and 327 miles. Telephone penetration has increased from 6.7% in 1996 to 10.7% in 1999.

Source: <https://cs.stanford.edu/people/eroberts/cs201/projects/2000-01/third-world/peru-overview.html>.

In 1975, Chile's Instituto Nacional de Capacitacion Profesional launched a distance education course to provide continuing education and technical classes and basic industrial training and specialized training from afar.

Enlaces, a Chilean initiative that linked school networks through the Internet, reached its target in 2005, enrolling 3.08 million students. There's also REUNA, a consortium university with a virtual division named Virtual-REUNA, and higher education programs like Quinto Campus, TELEDUC, and INA-CAP.

Adult Aymarans in Bolivia can listen to various basic education programs on Radio San Gabriel, which aims to help them integrate more deeply into Bolivian society. The Centro de Ensino Tecnoligico de Brasilia in Brazil provides basic education. With about 22,000 students each year, the Centros APEC de Enseanza a Distancia in the Dominican Republic provides upper primary and lower secondary level classes, as well as technical and skills courses in topics like Small Business Management and Home Electrical Installation. In Brazil, Project ACESSO is a relatively unusual example of a vocationally focused project that includes essential education elements for its target community of staff.

Bolivia has been working on radio-related programs since 1970 and is now starting to deliver interactive higher-education courses across its universities. One of the most intriguing is the Universidad Andina Simon Bolivar, a super-regional institution founded with the assistance of five Andean countries.

For 1,000 students admitted at three universities in Uruguay, Universidad ORT Uruguay, Universidad de la Republica, and Universidad Catolica del Uruguay, a series of virtual education courses is created. Guyana is currently working on the Guyana In-Service Distance Education (GUIDE) program, which seeks to improve secondary education quality by offering in-service school-based instruction for undertrained, underqualified, active teachers through a combination of distance-education approaches and face-to-face tutoring sessions (Howard, 2009). Since 2006, the University of Guyana and the Anton de Kom University of Suriname have been a part of the Caribbean Universities Initiative for Integrated Education, a collaborative project of UNESCO and the University of the West Indies that aims to enhance human resources' capacity to establish and implement quality distance education programs through the use of ICTs. Aside from a UNESCO pilot project on multifunctional group telecenters, there is no pertinent evidence on what has been achieved in Suriname regarding distance education.



Figure 8.8: Anton de Kom University was founded in 1983 and is presently the only university in Suriname. The university, located in the capital, Paramaribo. It comprises faculty of medicine, social sciences, humanities, mathematics, physics, technology, and other study centers. It is a major part of a culture in Suriname and represents the future of economic and social growth in Suriname. However, since many students outside Paramaribo are unable to attend the college, this means that there is not enough accommodation.

Source: <https://lr-group.com/project/anton-de-kom-university-suriname/>.

According to the study, Brazil, Colombia, Venezuela, Argentina, and Ecuador are countries with significant advances and continued evolution in virtual education and distance learning. Chile, Peru, Bolivia, and Uruguay are all working to put their projects into action. Guyana, Paraguay, and Suriname are all newcomers to the region.

In addition to national distance education programs, two universities abroad deliver graduate studies in South American countries: Mexico's Universidad Virtual del Instituto Tecnológico y de Estudios Superiores de Monterrey and Spain's Universidad Nacional de Educación a Distancia. In the last seven years, both have had regional offices and a consistent presence in the Latin American interactive higher-education industry. There are also new efforts to create multinational interactive education programs.

The ITU Center of Excellence for the Americas, supported in the courses sponsored by the Inter-American Telecommunication Commission, was an Educational Portal of Americas Virtual classroom with assistance from the Organization of American States (OAS), which served 140,000 graduate students across many specialty programs.



Figure 8.9: An international organization, established on 30 April 1948 to support unity and co-operation among its member states in the Western Hemisphere, is the Organization of American States or the OAS or OEA. The 35 representatives of the OAS are sovereign nations, based in the U.S. capital, Washington, DC.

Source: https://en.wikipedia.org/wiki/Organization_of_American_States.

The most important institutions in this field are the Inter-American Education Consortium (CREAD), run by the Nova Southeastern University; the International Ibero-American Association of Distanced Higher Education, based in UNED, Spain; the Latin-American and Caribbean chapters; the Inter-American Education and Telematics Training Network; and a Virtual Center, located at the Universidad Tecnica Particular de Loja in Ecuador, to establish standards for quality in remote higher education in Latin America and the Caribbean.

The main aim of this project launched in 2005 is to identify categories, standards, and sub-criteria for the consistency of an entire course manufacturing cycle and perform a preliminary pilot validation test once the

international expert advisor committee reaches a consensus and promotes extensive distribution of information gathered throughout the region.

In January 2005, the OLPC Association (One Laptop per Child) was established to create a \$100 laptop and distribute it to children worldwide, particularly in developing countries. The company will play a key role in improving computer-based and interactive education in South America in the coming years with low-cost laptops like XO-1, a particular system with features specially created for children in the developing world, and INTEL's commercial equivalent Classmate PC. Four South American States, Argentina, Brazil, Peru, and Uruguay, have participated in OLPC since July 2007. A pilot project began in Villa Cardal, Uruguay, in May 2007.

Reliable knowledge on past and current South American distance-education programs is scattered, hard to come by, and unorganized. However, in institutions such as IESALC, more domestic, regional, South American, and institutional work is required for results to systematize virtual higher education content. Furthermore, instruments must be built to calculate the actual effect of distance-learning programs on improving the community's living conditions (Graham, 2002).

In today's South American distance-education programs, there are few other options for providing education to the most marginalized population classes, aboriginal peoples, and those living in remote rural communities lacking access to public utilities, where ICT cannot be used. Complementary programs with inclusive features can be implemented using appropriate technology to minimize social disparity.

Virtual colleges are already in their early stages of growth. In most cases, a critical mass of attendance must be met in the coming years for self-financed institutions to provide high-quality education at affordable prices to the general public; otherwise, another means of funding must be sought.

Multi-national organizations will emerge as national virtual ventures begin to establish continental cooperative networks like RIVED or RELPE, and consortia universities consolidate, most likely with the funding of UNESCO, MERCOSUR, OAS, ICDE, or other private enterprises.

This type of regional convergence would eventually force the establishment of a South American distance-education network representing South American countries and Latin Americans and Hispanics in other countries. Virtual education programs led by national governments such as Huascan, Enlaces, Proinfo, and others prepare potential ICT literates. If these programs achieve their stated objectives, by 2010, more than 20

million prospective students will use the necessary skills to use interactive studies as their primary source of education.

8.4. TEACHER EDUCATION DISTANCE LEARNING PROGRAMS

The project aimed at educating teachers is popular. The Instituto de Radiodifusão Educacional da Bahia in Brazil proposes a teacher-training program for primary school teachers (as well as a secondary program for adults). Via distance education, the Logos II service teacher education campaign in Brazil tackled the requirements of underqualified and unauthorized primary-school teachers, especially in rural areas. Students were given communication materials and were expected to join monitor-led face-to-face meetings on request.

Exams that were similar to those used in the standard programs were available to students. The 3200-hour program includes a distance education curriculum that combines self-taught course materials with school-based instruction, as well as bi-weekly seminars. Since the end of 2001, the project is critical because it has been unconstitutional for states or counties to hire individuals as classroom teachers who have not been licensed as eligible to teach under Brazil's National Education Law.

While there is scope to be hopeful about open and distance learning prospects in Latin America, vicarious government support and persistent underfunding continue to plague the region's distance education programs. There is a lot of local knowledge and a will to make things work. The task is to integrate it more effectively into each country's formal educational structure and help and, at times, regulate private-sector quality.

Below is a list of online education channels offered by the Ministries of Education and additional learning tools available in the region to analyze better the most prominent players, mainly government-oriented, of distance education trends in light of the Covid 19 pandemic.

8.4.1. Argentina Seguimos Educando

The official online educational site of the Argentine Republic's Ministry of Education is managed by EDUC.AR, a State Society. It carries out the Ministry of Education's policy on incorporating information and communication technologies into the educational system. The Varsavsky

Foundation, which donated more than 11 million dollars to the Argentine government for this reason in May 2000, helped to establish EDUC.AR SE.



Figure 8.10: Argentine Republic's Ministry of Education.

Source: [https://en.wikipedia.org/wiki/Ministry_of_Education_\(Argentina\)](https://en.wikipedia.org/wiki/Ministry_of_Education_(Argentina)).

The platform went live on September 18 of that year, making it the region's first ministerial educational portal. The original goal, which it has maintained over time, was to enhance teaching and learning through ICT use. The site began with three primary purposes in mind: The creation of instructional content, the creation of a teacher preparation program, and the establishment of school connectivity. However, during the 2001 Crisis, the project's progress was put into question, as was the economic condition in which the portal was left after the National State spent a substantial portion of the funds raised from the donation in Argentine debt bonds that would later default (Gershberg et al., 2012).

The platform purpose was reshaped by the advent of a new government, led by Daniel Filmus, in 2003, at the Ministry of Education of the Argentine Republic.

Alejandro Piscitelli was responsible for managing the site and implementing the Ministry's policy on implementing the ICT in the education sector. The National Education Law, passed in 2006, reaffirmed this.

The Ministry of Education ordered the EDUC.AR platform to create 1 to 1 model pilots from 2008, which would later be the Connect Equality initiative, for which more than 20,000 interactive learning items were made, to teachers and students. During Alberto Fernández presidency, the axes of EDUC.AR was to promote Internet school computer literacy; offer digital technologies and tools; build interactive and technical training platforms, and create technology advancement spaces. They are continuing to educate in the form of the COVID-19 pandemic of quarantine 2020 in Argentina.

8.4.2. Colombia Aprende Education Portal

The government of Colombia has agreed to aid pupils, teachers, and parents using a multi-channel strategy in response to the school closures and to support continuous education during the COVID-19 pandemic. The Ministry of National Education (MinEducación) supported the educational group free of charge through its Learner Digital portal (Learning Digital). The materials are available in many ways, from publications and journals to immersive 3D games, eBooks, digital archives, online tutorials, audio and video books, and virtual learning objects.

The Education Ministry has developed the Contact Maestro teacher portal to assist teachers and school leaders through webinars and interactive training programs

It was not only the key priority to get these services online to students but to ensure that teenagers, teens and young adults worldwide had access to these educational materials in the course of a health emergency. Thus, a free navigation portal was developed for any mobile device by Decree 555 on 15 April 2020 (<https://movil.colombiaaprende.edu.co/>).

The Ministry of Information Technology and Communications (MinTIC) issued this decree in a concerted work, which stipulated that mobile operators should provide the educational sector a zero-rated condition. One of the most important means of improving cost-free access to education content is by “zero scorings” initiatives: This practice would not tax Internet and telephone operator data on individual platforms and websites.

The main purpose of this zero-rate platform, which was created in collaboration with telecom operators in the country by the Ministry of Information Technology and Communications and the ministry of national education, is for all citizens to have access to educational content and guidance that focus on households with low income. The telecom operators agreed to make the required modifications to their technical systems to

provide the decreed service. Consequently, Colombia Aprende Móvil promotes communication access to rural and urban areas through free navigation (without accessing data) in the web edition of the Colombia Aprende website for teachers and parents, and students (early childhood education to secondary education). For smartphone users (voice and data), this service provides up-to-71 214 pesos or roughly USD 20 in prepaid and postpaid modes (two Tax Value Units, or Unidad de Valor Tributario). This deal between the ministries and telecom providers means that a zero rate is paid for data relating to this particular training location.

8.4.3. Chile Aprendo en Línea

The Chilean Ministry of Education has added a new online source to the “Aprendo en Línea” website to strengthen remote learning. Its goal is to help teachers with the implementation, after the suspension of face-to-face classes after the emergency from the Prioritized Curriculum established by the Ministry providing pedagogical resources for students from 1st grade of primary education to 4th year of secondary school.

The website consists, for example, of nearly 20,000 educational resources: 5,500 manuals, 3,000 training assessment exercises, 300 pedagogical archives, 300 articles, 30 videos for conferences, and 200 orientation papers. Teachers and administrators must go to aprendoenlinea.mineduc.cl to enter this site and click the button “teaching.” They will find the topics they need to develop.



Figure 8.11: Aprendo en Línea website.

Source: <https://www.meganoticias.cl/dato-util/295343-aprendo-en-linea-min-educ-estudiar-en-linea-clases-virtuales.html>.

8.4.4. Ecuador Educa TV

Educa is a public television station in Ecuador. It was established as a network in 2012 and as an independent television station in 2013. Their programming is focused on the field of education. It is owned by the State of Ecuador via the Education Ministry. It is operated by public media.

The Education Ministry opened the television program Educa on 1 October 2012. Roughly 168 TV channels and cable providers in the country were broadcast. This belt of girls, young people, and families was transmitted by private media.

The channel frequencies were formally opened on Tuesday, 2 December 2014: 28 in Quito and 43 in Guayaquil. A significant event was organized at Quito's Educational Unit Replica and Guayaquil's Aguirre Abad. The Education Minister Augusto Espinosa opened the meeting. The manager of the "Education" initiative is Monica Maruri.

The Ministry of Education is nominated for the Latin American Television Network (TAL) 2020 Awards in the "Identity and Inclusion Content" category through the "EDUCA Contigo" project and the "SOY" series. A committee has been set up to evaluate the audio-visual content for a month and then submit it to a simulated ceremony planned for mid-December this year to elect the award-winning productions.

The 'SOY' serial consists of four thematic segments: 'soy art,' that promotes a love for the arts; 'soy science,' that promotes inclusive research work and strengthening of national references; 'I've got a lot to do with physical exercise and play,' and 'I am gastronomy,' which reveals diversity through fruitful land and food preparation activities (Balán, 2006).

"SOY" is a development operated by the EDUCA Contigo team, which belongs to the Ministry of Education's Undersecretariat for Education and Good Living. This appointment recognizes the systemic commitment to ensure the exposure of the education sector to quality information.

8.4.5. Paraguay Tu Escuela en Casa

Given the crises caused by the nation and the world, we are facing this attempt today to continue to learn, "Tu Escuela en Casa." "Your school at home." This means that this very critical educational method is being implemented so that students can access conventional materials.

The education information and communication technology policy aims to help advance educational systems by using ICT and developing the

requisite technical skills for all students to take part in society. Microsoft Paraguay SRL promoted an institutional and intersecting collaboration culture within its area of Corporate Social Responsibility in Education that involves and mobilizes stakeholders in their growth in the process of change that is characterized by the inclusion of various initiatives and the responsibility of the actors concerned to ensure that the positive effects are achieved.

The Education and Science Ministry is dedicated to:

- Using services and incentives earned for educational reasons only correctly.
- Provide personnel to promote, subject to availability, the use of contributed technical instruments.
- To appoint officials to cooperate, as available, to implement a methodology framework for integrating technology into school education.
- Microsoft Paraguay SRL, on the other hand, has committed:
- Give teachers and students of the Ministry of Education and Sciences education institutions free access to the Office 365 Online.



Figure 8.12: Paraguay student in Tu Escuela en Casa.

Source: <https://npy.com.py/2020/03/tu-escuela-en-casa-mec-presenta-clases-virtuales-ante-contingencia-por-covid-19/>

- Give guidance on software for monitoring and updating software on Windows.

- Provide admission, subject to availability, to the Microsoft education center and MS Learn to encourage teachers and students to develop their creativity and digital skills.
- The Virtual Library, a website of the MEC with teachers and students' didactical materials, was also provided

8.4.6. Bolivia-Aula Virtual Para la Educación en Bolivia

Education offers the educational platform “Virtual Classroom for Education in Bolivia,” (CVSP) is a pan American Health Organization's (PAHo) educational platform that seeks to contribute by promoting the transformation of health services and practices in the region of America to the growth of the capacity and skills of healthcare workers.

The CVSP is an international network of individuals, organizations, and organizations in various countries that exchange courses, expertise, and programs with the shared aim of improved skills and public health practices through health technology. Information and communication. Information and communication (Gasperini, 2000).

The program includes a panoramic view of the various processes and activities of online training management, offering both a reflection and an instrumental view which ensures good training practice in the context of permanent health education.

The purpose of the course is to:

- Train experts to behave in the context of the PAHO Virtual Courses as tutors, coordinators, and developers.
- The development of interactive education skills within the CVSP.
- The teaching of health practitioners from a permanent health education standpoint is problematic.
- The tutoring and coaching job in the CVSP Moodle classrooms is known and practiced.

8.4.7. Brazil-Banco Internacional de Objetos Educacionais

educational materials from pre-school education to university education. The International Bank of Education (BIOE), in cooperation with the Ministry of Science and Technology (MCT), RELPE, Organization of Ibero-American States (OEI), and some Brazilian universities, is a repository¹ established by the Department of Education (MEC).

BIOE is responsible for the location, cataloging, evaluation, provision, preservation, and distribution of digital education objects, which are widely accessible in various formats, deemed necessary, and adapted to the educational culture of Brazil and internationally. It is intended to include multimedia learning objects, free access in multiple languages and modes, encourage their use in education, and promote collective democratization of the content.

BIOE began operating in 2007 and was nationally unveiled in 2008. This repository cooperates with some Brazilian universities, including the University of Brasília (UnB), responsible for identifying, assessing, and cataloging free digital educational services. Following the educational standards given in Brazilian Education Guidelines and Basic Law, digital education services are made available. BIOE visited 1,089,495 countries in March 2009 and released 9077 multimedia tools from 156 countries.

DSpace framework, the open-source system built by the Massachusetts Institute of Technology and Hewlett-Packard, is a program used to incorporate BIOE, commonly used in the development of digital libraries, and aims at collecting, preserving, managing, and disseminating the researchers' intellectual product. The DSpace Metadata Storage Protocol for the Open Archives Initiative is a data provider. DSpace accepts all digital materials, including text, image, video, and audio files, that enable inclusion, such as journals, books, technical papers, lecture articles, etc. Sets of information programs of the machine.

BIOE has resources from various countries and languages to enter, use, and apply resources in its mother tongue for every element in the educational environment, anywhere globally, producing productions in the collaborative method. BIOE is structured around groups and collections in line with Brazil's curriculum and educational component level. Furthermore, a subset of the property class is present. There will be an infinite number of tools in each set / sub-collection. BIOE deals with educational tools that use the most varied fields of expertise, languages, and formats for textual and non-textual components. An expert committee consisting of teachers and scholars from the teaching areas protected by the BIOE assesses the educational materials requested. The committee aims to ensure the consistency and usefulness of the resource and adjust it to the proper education standard. The publication of the committee is approved after a favorable assessment of the appeal. As the submission is connected to participating universities, the BIOE does not yet enable resources to be auto-archived.

8.4.8. Uruguay Plan Ceibal

Plan Ceibal offers tools for teachers and students available from any computer and remote services to alleviate the impact of the suspension of education because of the extended closing of the schools. The Ceibal Plan is an Uruguayan proposal to adopt “One Laptop per Child” to incorporate ICT in the primary public education sector, which starts with the extension to high schools.

Plan Ceibal provided 450,000 laptops for all primary education students and teachers throughout the country across a period of 4 years. As of 2009, the findings include greater autonomy for pupils, better student and professor motivation, and active parental involvement (94% approve of the Plan according to a national survey performed in 2009).



Figure 8.13: Uruguay students with equipment for distance learning.

Source: <https://www.correo.com.uy/plan-ceibal>.

This is not only a result of technological advances but also of accomplishments, including the establishment of an education scheme for primary teachers, the active participation of the community and teachers in this project, as well as the practical design and implementation of a monitoring and evaluation model to evaluate the effect at the national level as a guideline for the definition of future actions.

As a result of the digital divide between people who had no access to technology and those who did in Uruguay, the Ceibal Projekt has arisen. It was pushed for the term of office of Tabaré Vazquez. This pioneering project was promoted more by Vasquez, but it was influenced by the project One Laptop per Child by Nicholas Negroponte. It raised three central values: technology distribution, awareness promotion, and social equity generation (Gamboa, & Waltenberg, 2012).

The project was renamed “Ceibal” like the traditional Uruguayan tree and flora or “ceibo,” called Cockspur coral tree in English. Ceibal also stands for ‘Educational Connectivity/Basic Computing for Online Learning.’ The following language is available online. “Ceibalitas,” the OLPC XO-1 computers used in the project.

Ceibal Project seeks to facilitate the global integration between Uruguayans and Uruguay and the rest of the world. The digital divide is reduced. This objective can only be fulfilled if instructors, students, and their families are accompanied by an instructional schedule. Ceibal Project’s instructional strategy aims to build technical capabilities, teacher training, appropriate material, and social and familiar involvement. Ceibal Project has strategic guidelines: education justice, the equality of chances between children and young people, and the development of resources to acquire not just school knowledge but also the knowledge that the child can learn unsupervised.

8.5. DISTANCE EDUCATION IN SOUTH AMERICA WITH COVID 19

Every government has arranged various alternatives to schooling to ensure the quality of learning since the beginning of the pandemic in the Latin American and Caribbean region. UNICEF’s 24 country offices in the area have assisted education ministries in establishing multi-sector response measures, including priority curricula, teacher training, and programs for distance learning. Around 42 million Latin America and the Caribbean students receive UNICEF-supported distance education, homeschooling, and education via radio, TV, Internet, and other channels to help tackle the mass suspension of education services.

Apart from Suriname and Uruguay, where schools are open, the rest of the continent has either partially or closed schools. A total of 137 million children in Latin America and the Caribbean are receiving training in

COVID-19. On average, four times more school days have already been postponed to children in the country than the rest of the world. Though schools in many parts of the world are increasingly reopening, the vast majority of classrooms in the whole area remain closed. More than one-third of all Latin American and Caribbean countries have yet to establish a deadline for reopening their schools. The continent is seeing a generational tragedy.

Whether children are not able to go to kindergarten, they are not just privately taught. Children miss the rhythm and cannot communicate with peers without structured school time. Some people rely on school food programs and therefore skip their only nutritious meal. In addition to raising their vulnerability to malnutrition, child neglect, sexual harassment, child marriages (or early unions), and violence, they are more at risk from other risks at home or in the neighborhood and the education sector being unable to live with them.

A recent World Bank study notes that about 120 million school children in the country have either missed their entire academic preliminary education year or were threatened to lose them due to pandemic-containment efforts. And while governments have tried to reach these students through online learning and other multi-modal solutions, too many break down (Fernández-Arias & Montiel, 2001). Schools and households were also unable to make a move. For instance, only 77% of 15-year-old LAC pupils had internet access, which was far more challenging for deprived populations. For example, only 14, 19, 24, and 25% of lower-level students have internet access in their homes in Peru, Mexico, Panama, and Colombia.

It is predicted to have an astonishing and enormously disproportionate effect on literacy and other educational outcomes. Much before the pandemic, Latin America and the Caribbean experienced an educational crisis. The percentage of the young people in the area who could not read an introductory text – known as the 10-year-old percentage – was already very high at 51%. Furthermore, the region has become unequal access to quality education for students worldwide.

In Brazil, for instance, poverty education in Sao Paulo was 27%, while in the state of Maranhão, it was 70%. This was further aggravated by the pandemic. It is impossible to return to school at least 15% of students. The lack of learning for children in the lowest quintile of income is expected to be significantly higher, broadening the currently significant socio-economic education deficit by 12%. In certain nations, the earlier reopening of private

schools to public schools contributes only to this growth. Although things used to be grim, they worsen if we don't do anything about it right now.

For instance, learning losses may result in future possible gross earnings in the region of US\$1.7 trillion, approximately 10% of the total baseline earnings, which corresponds to about 16% of the regional GDP.

Moreover, financial hardship to families and the disruption of school facilities, including food for ten million students, hurt the students' physical, mental and emotional health. Governments and everyone interested in education in our area now have to respond to minimize the disruption, spend and recover from the massive loss of learning and use the ability to reform to improve education.

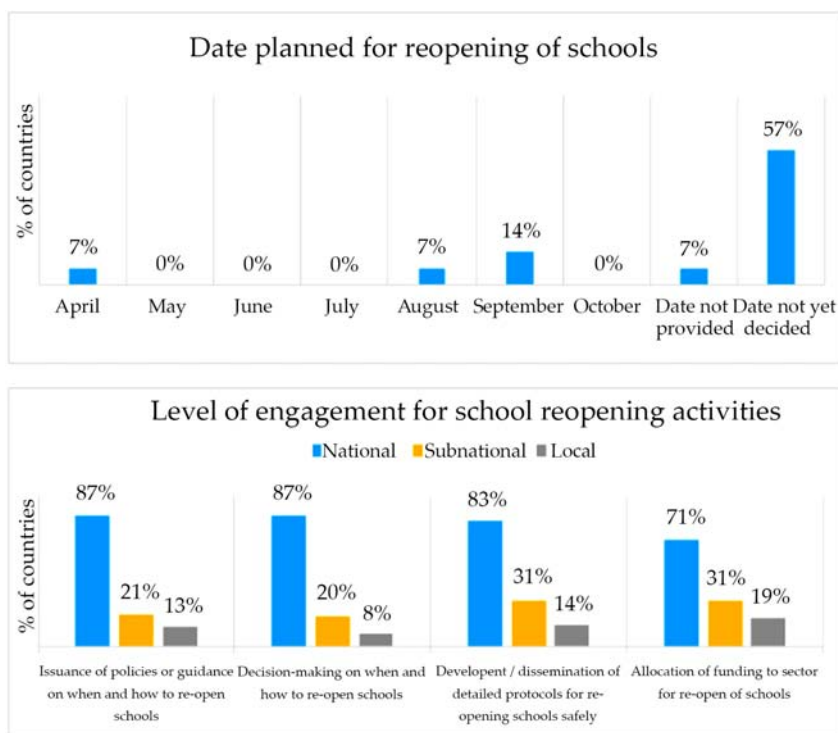


Figure 8.14: Covid 19 and its effect on education in South America.

Source: <https://www.unicef.org/lac/en/media/14246/file>.

While the obstacles are enormous, the possibility of building up school structures is also immense. The pandemic opens the door to long-overdue infrastructure investment to bridge the digital gap, invest in students, make

their careers more professional, and provide them with the instruments they need to play their ever more dynamic positions and serve the roles of parents and communities within education processes. This may happen quicker and more accessible (e.g., there are already fewer mental obstacles for teachers to respond to emerging technologies).

In the light of accelerated developments, the transition to online higher education was made. A brief overview of the declarations by leading Latin American organizations in higher education reveals how leaders in the field advocate for ERE (emergency remote education) to be adopted and potential hybrid post-COVID approaches. These calls echo the need to find ways of alleviating permanent inequalities in the area.

When Latin America's higher education institutions were in the hurry of moving their lessons online, they faced at least two main constraints: (1) the drawbacks of unequal Internet and access to technology; (2) their short-term capacity to do so.

Chapter 9

Rise of Educational Technology in South America

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9.1. INTRODUCTION

Education is a valuable resource in ensuring that a country or a community achieves development goals. Different countries adopt various methods and strategies to ensure that their education system is functioning efficiently and provides every child equal opportunity to achieve their potential. It has also resulted in government investment in improving their education system (Friedrich, 2014). In South America, several improvements are being made to the education system to foster development. The only challenge with the education system in most South American countries is that there is a limitation in the education market. This is because education reforms and investing in the education processes is needed to foster growth in the education sector. Education is a valuable asset around the world. Regarding universal understanding, education is a crucial tool that can be used to advance a society.



Figure 9.1: South America among other countries in the world are embracing educational technology.

Source:<https://www.google.com/url?sa=t&source=web&rct=j&url=https://an-osmia.info/image-gallery/Education-stock-photos&ved=2ahUKEwjPx9WnxNLwAhWOjqQKHqDo0QFjAAegQIBhAC&usg=AOvVaw0OSVwZbFeAI-UN1RIRA2iZE>.

South America and other countries are still struggling to ensure that every child gets access to quality education. Most individuals are unable to afford

education. Parents earning low income are less likely to be willing to pay for their children's education more if they have many children and the cost of education is high. There are high records of parents who are unwilling to pay for their child's education in the world. This further worsens the issue of inequality in education. Children from wealthy backgrounds can afford an education while those from poor backgrounds are not. Parents who pay for their child's education question the amount of knowledge being transferred to their children. To ensure that children can access education, most public schools in developing countries receive free education. For parents who can afford financial stability, they are allowed to take their children to private schools.

In most cases, the provision of free education is mainly made in primary education. There are different levels of education offered in South American Schools. Children from the age of 6–11 get primary education. Those aged 12–17 get a secondary education, while those who receive higher education are aged 18–22. The Ministry of education is working to improve the quality of education offered to children. They look at the methods and techniques used in training teachers and the teacher-student ratio (Creighton & Park, 2010). The ministry has also worked to align the quality of education offered to meet the demand in the workforce. In the current day and age, the force is dependent on the use of technology. This requires individuals to enter the workforce to possess digital skills. This has created the need for technology in the education sector.

9.2. BENEFITS OF TECHNOLOGY IN THE EDUCATION SECTOR

Technology has helped transform the education sector. The classroom environment used traditionally is not the same one used today in South America. Traditionally, teachers would use chalkboards to teach. With the introduction of technology in the learning process, chalkboards have been replaced with digital whiteboards. It has also resulted in the heavy use of iPads in the classroom. The use of technology has advanced the education sector and helped improved learning in students. One of the benefits of using technology in the school is that it enables teachers and students to access numerous internet resources. They can use different materials to teach children. Technological tools make it easy for teachers to teach their students.



Figure 9.2: Technology provides teachers a variety of resources useful in the classroom.

Source:<https://www.google.com/url?sa=t&source=web&rct=j&url=https://www.teachhub.com/technology-in-the-classroom/2019/11/benefits-of-technology-in-the-classroom/&ved=2ahUKEwiHmZ6GxdLwAhUF4aQKHTRRBHEQFjAAegQIBRAC&usg=AOvVaw2k3tXVDUzCjOr9Y0kSkTpO>.

The use of technology in the classroom helps create engaging learning environments. The ideology of technology being used in the workplace has faced numerous controversies. Some believe that the use of technology will distract children from understanding what teachers are teaching. However, recent data on the use of technology in classrooms show that technology has helped keep students engaged. Technological tools such as tablets, computers, whiteboards, and other technical devices have helped keep students engaged. It removes the traditional classroom setting because learning involves fun activities and is more interactive. The use of technology provides teachers various teaching styles. Technology is helpful in modify teaching tools to enable teachers to meet the needs of students. This is very important as children are all different and face different challenges. Technology provides different methodologies and software that can be used in assessing students. They can then choose a teaching technology suitable for all children. It enables children to create a learning plan ideal for all students.



Figure 9.3: Infographics help develop a child's artistic talent.

Source: <https://thinkcreative.uk.com/the-importance-of-infographics/>.

Students pursuing art or have art classes can use infographics during classes. Through these, teachers can know the students' capabilities and also know if students grasp knowledge taught in class. It is a form of student assessment. Technology enables teachers to use different teaching approaches. They can tailor instructions making the learning experience benefit the student. Technology fosters collaboration among teachers and students (Cox, 2013). By using technology in the classroom, students can assist each other in different subjects. Students can assist each other in technology-based issues. Most matters require students to consult with other students and their teachers.

In most cases, teachers put children in groups to enable them to assist each other. They can share knowledge amongst each other. Technology allows children to research and gets new information. Technology provides students and teachers a platform to enable them to communicate with each other.

Technology helps prepare students for the future. The education system is meant to prepare students for the workforce. It equips students with skills to enable them to work in different areas. With the current day and age, the crew requires students to join in possessing digital skills. Using technology in the classroom helps prepare students for the digital workplace. This

is because students interact with various technological tools that allow them to acquire different digital skills. The current Curriculum used in school has integrated technology in certain subjects. Some subjects are specifically catered to teach students technological skills. This will enable parents to meet the digital demand. Technology allows students to connect with teachers. Technology is a helpful resource in fostering a relationship between teachers and students. By integrating technology in the classroom, teachers and students can increase their knowledge of the topic. As time goes on, technology will continue to change and improve. Schools need to adopt the latest advancements in technology. In South America, teachers are encouraged to use technology in the classroom. It helps foster critical thinking skills in students.



Figure 9.4: Digital skills are required in the current workplace as there is a lot of dependence on technology.

Source: <https://www.skillshighway.govt.nz/resources/building-capacity/digital-skills-in-the-workplace>.

9.3. USE OF TECHNOLOGY IN SOUTH AMERICA

The use of technology in South America is pervasive. Several individuals use technology in their homes and schools. There are several internet users in South America. They contribute to a large percentage of the world's internet market. A country like Brazil is ranked number four globally regarding internet marketers, with about 140 million individuals using internet services. Research shows that there is an expected increase in the number of internet users. It is reported that about 40% of the world's

population uses mobile phones, and the numbers continue to increase. The number of internet users in Mexico in the year 2021 was about 50% of their population. About 58.5 million of the country's population are known to use mobile phones. In most South American countries, technology is highly used and readily available for all individuals. The development of technology is quickly adopted in these countries. These countries are crucial to fostering technological innovations. However, there are certain conditions needed to facilitate the innovations.



Figure 9.5: Brazil is among other countries known for their dependence on technology.

Source: <https://theculturetrip.com/south-america/brazil/>.

9.4. HISTORY ON EDUCATIONAL TECHNOLOGY

EdTech solutions are involved in determining the conditions needed to foster innovations in the technological sector. However, the technical industry is broad. The same applies to the EdTech field. Researchers must narrow down the different specialized areas to their relation with education. This is because there are various forms of EdTechs. For instance, there is a gamification platform known as Yogome. The platform is used in the education sector to provide academic content. The company produces

video games having educational content. Most Higher learning institutions use technology to offer blended learning, which involves some students receiving some classes online. This allows tertiary universities to provide education for other students from other parts of the world.



Figure 9.6: Students can opt to receive online courses offered by universities.

Source: <https://www.vistacollege.edu/blog/online-learning/7-tips-to-make-your-online-learning-more-productive/>.

In the technological world, the integration of technology in the learning environment. This has resulted in the term Educational technology. The term has been shortened to form EdTech. The term refers to all technological innovations done to improve the education sector. The introduction of technology in the education sector began in the 19th century. This was referred to as technical reform, which began with MOOCs being introduced. It was introduced in education to provide other educational solutions (Behrman et al., 2001). They look into possible avenues for interactions for various participants by availing a variety of online tools. These tools create a very conducive environment for learning that would not be helped when traditional teaching methods are used. Since the start of educational technology, reform has caused a growing need to improve the education sector. This is achieved through the adoption and integration of new technology. Schools are encouraged to be innovative.

Several organizations have been involved in the education sector. One of the organizations includes Navitas Ventures. It has helped provide support and capital to startups in the education sector. The organization mapped EdTech's landscape and helped recognize several companies. The acknowledging of companies was done according to a certain number of

classifications such as the career plan, the courseware, and Curricula used in testing prep. Technology-based universities have been involved in mapping educational technology companies. Research done by these universities shows that most EdTech companies in South America started in Brazil. Most of the companies working on fostering educational technology in South America are found in Mexico and Brazil.

9.5. EDUCATIONAL TECHNOLOGY IN BRAZIL

Brazil's population is made up of about 207.7 million. About 40% of the country's population is made of individuals younger than the age of 24. In Brazil, student enrollment in primary school in 2016 was about 93%. According to the research done by the World Bank, about 87% of those who enroll in school complete their primary education. The percentage of students enrolled in secondary schools is about 81%. This is a decline in the number of students who enrolled in primary school. There is a further reduction in the number of students enrolled in tertiary learning institutions. In the same year, student enrollment in universities is about 51%. The Brazilian government is working towards improving national education. The urge to improve the education system has been noted for years, with numerous measures being put in place to achieve state goals.



Figure 9.7: Brazil is investing in education reforms to improve the state of education.

Source: <https://reason.org/commentary/sensible-education-reforms-to-complement-school-choice/>.

Education was made a national priority in 1995. This resulted in national guidelines to be used in education being drafted. It also meant that the government would have to put aside resources to fund primary education for students. Education has been maintained as a national priority through the years. New presidents continued to support the education sector. Education was a preliminary schedule in the year 2002. The president at that time helps the education sector achieve significant milestones. There was an increase in the number of funds allocated to both primary and secondary schools. The same applies to salaries given to teachers. Grants were also given to students from low income, allowing them to acquire education in private universities (Cole & Murphy, 2009).

President Rousseff spearheaded a new National Education Plan in 2014. Initially, the plan was created in 2010 but actualized in 2014. The objectives National Education Plan was to ensure universal education is provided for students from age 6–14. The same case was to apply for children of 15–17. The plan sought to ensure that children didn't suffer from malnutrition. The project required the government to increase its investment in education. The problem with the education system then was focused on increasing access to education for children. This has been useful in that students who drop out of school in tertiary institutions have significant science, math, and Portuguese knowledge. Brazil has been dealing with high levels of illiteracy. There is still work being done to help improve the illiteracy level. However, there is a gap in the education system.

With the introduction of technology globally and the numerous benefits, the Brazilian government adopted technology in the education system. Currently, integration of new technological changes is much easier as Brazil has become more dependent on technology. Integration of technology in the learning environment seeks to ensure that ICT tools are used in all levels of education. The initial steps to the integration were done in the 1970s. ICT tools were introduced in the K-12 that focused on utilizing ICT tools to educate children. Later in educational policies were developed in the 1980s to allow various programs and projects to be integrated into the education system at the national level. The approaches used in the Brazilian education system are analyzed using the Four in Balance Model. Some of the projects and programs used to foster educational technology include the EDUCIM project, PRONINFE, ProInfo, and other national programs were developed. The projects seek to introduce technological infrastructure and resources to facilitate educational technology. The educational technology reform saw the introduction of school curriculum that have integrated technology



Figure 9.8: Various ICT tools have been integrated in the education sector.

Source: <https://www.ictesolutions.com.au/blog/the-best-ict-tools-to-use-in-the-classroom/>.

9.6. MEXICO

Mexico is a country having a population of about 127.5 million individuals. Its population is the 12th largest globally. Research shows that the student enrollment rate at the primary level is about 95%, while secondary schools are about 77%. At the tertiary level, student enrollment is at about 37%. There is a noted decline in student enrollment as one proceeds from one level of education to another. Several factors are contributing to the slide, among them being financial issues in families. There is a great demand for education in Mexico as about 45% of its population comprises individuals aged 25 and below. A study of the education history in Mexico shows that the country has been struggling to meet the growing needs of its population, more so about education. The president in the year 2006 made it his agenda to improve education. A significant issue in the education system is accessed. In his reign, about 75 higher learning institutions have been established. Higher learning institutions like campuses have expanded, allowing more children to acquire higher education (Chang, 2019).

Although the Mexican government allocates about 23% of the federal budget to fund education, many of the funds go to paying teachers. School construction, maintenance, Curricula, and technology occupy about 3% of the education funds. The amount of funds allocated towards the education sector is not sufficient. It makes it hard for schools to establish

new materials and infrastructure. This creates a limitation for the adoption of technology in the workplace. There are high concentration rates in Mexico, meaning that about half of its students do not get the opportunity to decide whether they want to attend high school. The main challenge is inadequate infrastructure such as schools. There are numerous measures to be integrated to ensure the demand for education is met. Education reforms in the country result in incorporating technology in the learning process, allowing more students to get an education. This has involved technology being used to create websites for schools that will enable students from different learning processes while in other world areas.

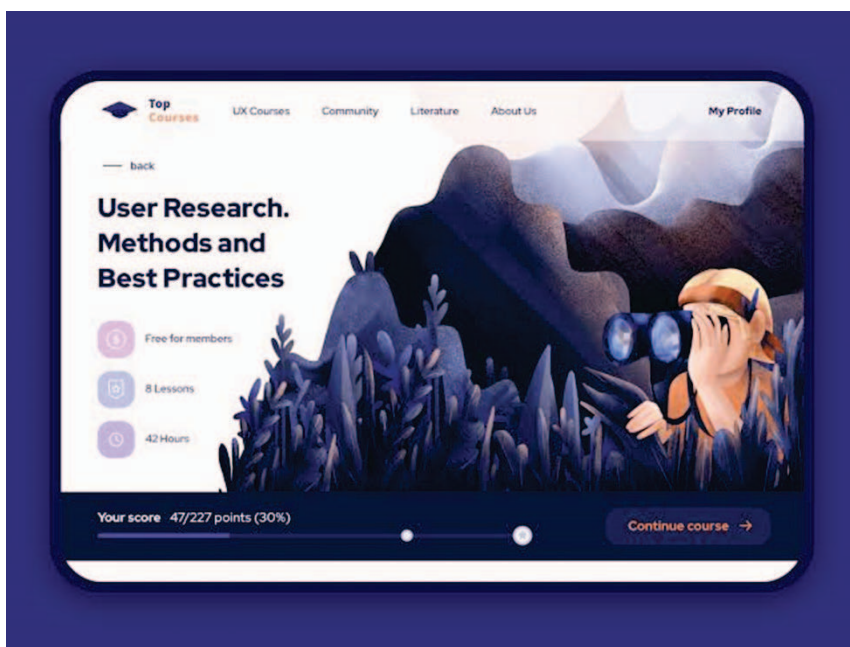


Figure 9.9: Various websites have been created to allow students to get an education.

Source: <https://cadabra.studio/blog/how-to-design-educational-websites>.

9.7. EDUCATION STAKEHOLDERS IN SOUTH AMERICA

Any changes or transformations in the education sector may require education stakeholders to be involved throughout the entire process. They are applied

when the government wants to adopt a specific education landscape. With the introduction of educational technology, stakeholders were involved. The technologies were adopted with the main aim of handling particular problems in the education sector. In the education sector, stakeholders include parents, students, professors and teachers, school staff, universities, school heads, and the government. In educational technology, stakeholders are involved in identifying the type of technology to be purchased to meet the educational needs. In most cases, EdTech companies are involved in the educational technology processes. Owners of these companies are aware that education stakeholders are looking to purchase some of their products; therefore, it is the work of the companies to identify problems in the education sector for them to create solutions to these problems.



Figure 9.10: EdTech companies are on the rise producing academic products.

Source: <https://contxto.com/en/market-map/here-are-9-edtech-startups-from-bogota-embracing-self-improvement/>.

EdTech companies are involved in educational technology across the world. Currently, various stakeholders are involved in the education sector and are pushing governments to invest in educational technology. Now, about 252 billion dollars of global funds will be directed towards educational technology on a worldwide scale. There is an increase in the number of funds given as the demand for technology is increasing. Most technologies are used in fostering online learning in schools. The market is expected to increase. South American government is focusing on improving education in their regions. The progress made by most countries causing

these countries to be ranked in fourth place in the globe for being heavily invested in educational technology. Investments put for the education sector are expected to increase.

Among the numerous resources provided by EdTech solutions is online learning. Recent data shows that about 12 million people receive online education. Apart from online classes, there are also those learning through podcasts, webinars, written materials, and collaborative software.

9.8. DRIVING FORCE BEHIND EDUCATIONAL TECHNOLOGY OPPORTUNITIES IN SOUTH AMERICA

Numerous factors are pushing the need for educational technology. Some of these factors have laid the foundation for the establishment of EdTech opportunities. They include the ever-increasing use of mobile phones and easy access to the internet. Mobile adoption has taken a route in South America in that they occupy high ranks in the world. Data shows that about 415 million out of about 690 million people have subscribed to a mobile network. In South America, about 60% of the population has a mobile connection through smartphones. With regards to internet access, about 63% of the people make use of mobile internet. This has resulted in the creation of numerous opportunities in the EdTech world, more so in areas that have not been exposed to education technology.



Figure 9.11: The presence of internet tools made it easy to integrate EdTech solutions for the education sector.

Source: <https://datafloq.com/read/amp/why-future-internet-will-be-decentralized/5370>.

The easy access to mobile phones is among the few reasons why educational technology is growing in South America. One of the numerous reasons people opt to use EdTech solutions is used among individuals because it is easier to access education online. Some prefer the online setting of learning compared to the regular classroom setting. Also, online learning provides individuals better working opportunities. In South American countries such as Colombia, they offer the best online classes allowing students to get better working opportunities. It has created an avenue for students in other countries to access such learning resources reasonably. Some websites offer some courses for free (Chang, 2019). However, there are numerous challenges faced in the education sector in South America. The government is still working to provide high-quality education for all children. There is still a large gap between children receiving quality education and those not receiving it. According to research done by the World Fund, about 2.2 million students in South America, more so in Latin countries, are not in schools, and high numbers of these students are likely to drop out of school.

The education sector in South America is expected to incur some changes to help solve some of the problems. Many educational technology startups have been involved in helping improve the state of education in South America. Some of the EdTech startups have received global recognition, and through that, they have been able to get individuals and organizations who want to invest in their education. Some of the Educational Technology and EdTech startups are as follows

9.8.1. The Learning Management Systems

Also referred to as the LMS is an academic software application. The software has numerous uses among is offering of training programs as well as giving of educational courses. It also provides development and learning programs. In education courses, the software application can document, track, report, and deliver the system. Currently, the global market for a software applications is at 9.2 billion dollars. By 2023 the market is expected to grow to 22.4 billion dollars. The growth is fostered by numerous factors. One of the reasons is the fact that companies are quickly adopting BYOD (Bring Your Device) and the provision of digital learning. There is also tremendous support from the government. The growing use of machine learning and artificial intelligence in the learning management system has resulted in it being utilized in education and corporate settings.

Among the commonly used EdTech solutions used in South America are cloud-based and SaaS solutions. The company is known to provide good internet connectivity compared to other organizations. They also facilitate the planning of educational development opportunities by Organizations. They can offer online courses and training options. In 2012, a platform known as Akademia was founded. It has played a significant role in the revolution of education management achieved by helping South American Schools. It has helped simplify educational operations. The platform comprises different tools in one dose allowing both schools and communities to get up-to-date information on activities in and out of the classroom.

Another platform used in the education sector is Collegium. It is a broad platform containing more than 50 applications that can be used by both parents and schools. The platform provides several tools for communication, library services, billing and collections, extracurricular activities, among others. Ariel Gringaus established the company in Chile in the year 2000. Since its establishment, the company has grown and established other branches in Uruguay, Chile, Colombia, Argentina, Peru, Brazil, and Mexico. The company was established to use technology to make school management much more accessible.



Figure 9.12: Students can access a library of books using a platform called Ludibuk.

Source: <https://startupboys.com/c%C3%B3mo-empezar-una-startup-en-chile-ludibuk-d22410f331b0?gi=45856d699263>.

Ludibuk is another startup company established in Chile. The platform gives Spanish-speaking students access to digital books. The platform provides feedback if a particular student read the book allocated for the day or week. They are also able to get a real-time report of the learner's progress. Among its achievements is that the company has been able to generate 300,000 dollars' worth of funds. Among the EdTech companies

in South America is Edoome. It is as Magma Portfolio Company (Cortina, 2013). The platform is handy to teachers as it enables them to create a virtual classroom. While in the virtual classroom, teachers send files and videos to their students. It is tailored in a way that teachers can publish students' grades and give quizzes and assignments. The company is quickly growing in South America. Among its achievements is that the company has been able to form a partnership with the Ministry of Education in Chile. The partnership aimed to integrate the platform in public schools. The integration was expected to impact the lives of about 3 million students and their teachers.

9.8.2. Enterprise Learning

Other than the usual learning processes, educational technology has been used in facilitating enterprise learning. Enterprise learning has become a regular occurrence as companies are educating their employees. This is to enable them to meet the demand for digital skills. It entails the incorporation of learning programs in companies. The learning programs have helped foster engagement and continuous learning among employees. Currently, there is a tremendous demand for EdTech platforms offering education on technical skills. This has resulted in training programs teaching cloud computing, data science, and security being highly sought for. The overreliance on technology is a result of traditional learning systems being outdated. Technology created a new alternative for companies. The benefit of using technology is companies can give training on courses in demand at relatively lower prices. However, the integration of this form of education has not been fully integrated into all countries. Those who have fully integrated educational technology are recording high levels of employee retention and competitiveness.

With enterprise learning, EdTech startups are working to provide learning solutions that are cost-friendly and efficient for the enterprise. Some of the startups involved in enterprise learning include Ubits. Ubits is a Colombia-based company offering alternative learning programs. The training programs offered are corporate-based as they are focused on equipping employees with skills in sales and leadership, among others. In most cases, the training is provided in the form of courses. The courses run for short durations and are personalized according to the company. This is to ensure that the value and time commitment of the training program is maximized (Brandhorst, 2011). The company is working in partnership with 70 other companies in South America. In 2018, it received an investment of about 120,000 dollars. Another startup company in the field of enterprise learning

is Eidos Global. The company works with other companies by designing customized educational solutions for either large or small companies. In some cases, the company has worked with governments in training citizens. The company was first founded in Argentina.

9.9. EARLY CHILDHOOD EDUCATION

The introduction of technology in the education sector involved it being integrated into early childhood education. For most startup companies, the area of early childhood has not been well explored. This is why more startup companies are entering the space. One of the companies in this space is baby tech. The startup company has been able to raise more than 260 million dollars. The funds were recorded from the year 2015–2017. Other companies, such as Kinedu, were involved in creating educational technology for early childhood education. The company has helped help families get a better understanding of early childhood education. By so doing, families can know and provide for the needs of their children. The company has helped help new parents cope with parenting life. Their programs utilize a specific algorithm that allows parents to specialize activities according to the child's development needs. The company's headquarters are in Mexico. The company developed the Kinedu app that has enabled the company to raise about 5 million dollars in funds and has about 2milliin users.



Figure 9.13: The area of early childhood education had been explored by start-up companies.

Source: <https://www.gettingsmart.com/2017/01/why-early-childhood-education-matters-now-more-than-ever/amp/>.

Another EdTech product is PlayKids. It was developed in Brazil to help children in early childhood education. It is among the apps established

in the early stages of educational technology. The application gives users several products that can be used in the learning process. It has numerous educational content for children, and it can be used on a global scale. Within the first year of its development, the app got over 6 million downloads and about 5 million users actively using the app. In Colombia, a mobile application known as BabySparks is used by parents in supporting their child's development. It can also be used in monitoring and evaluating the child's development. The programs used in the application enable parents to customize the application to meet the specific development needs of the child. The program uses intelligent adaptive technology to customize the needs of children. The company was established in 2014.

Papumba is another EdTech startup company. It was founded in Argentina. The company has programs and applications that parents can use in training their child's focus and cognitive control. It has also helped cultivate critical thinking skills (Bonai, 2007). The same case applies to the child's creativity. The company has created numerous applications and games helpful in helping children learn how to count, read and write the alphabet and know more about animals. There is also a startup company in Chile known as PlelQ. The company uses both AL and AR technologies to create educational toys useful in developing intelligence in children. The technology has been so helpful and encourages innovation, and in 2017, it was given an award for the Best Educational Innovation. This resulted in the company being recognized by the association of Childhood Educators.

9.10. EDUCATIONAL TECHNOLOGY IN CAREER DEVELOPMENT

There is a massive gap between the market demand and skills given to children in higher learning institutions. For students who underwent the traditional learning system, their skills are not sufficient for the job market. This is because conventional forms of education do not enable students to acquire digital skills needed in the workforce. The use of educational technology tools such as Massive Open Online Courses has helped bridge the skills issues. Currently, programs used in higher learning institutions allow students to acquire digital skills. Most of the programs used in higher learning institutions are made up of high-quality technological content. This means that individuals involved in developing the technology need to be highly skilled. This has resulted in great demand for software developers globally. In South America, there are inadequate numbers of software

developers experienced in programming. They're about 1.5 million vacancies for software programs.

Numerous startup companies are involved in bridging the digital gap. Some of the startup companies include Platz. The platform offers online learning as students are required to live-stream some classes. The classes offered are in line with the course. There are a variety of topics taught in schools. Some of the subjects taught in schools include analytics, SEO and Marketing, and data science. The company has been able to raise about 10 million dollars in the year 2013. About 400,000 students are pursuing different courses. Many students using the platform are from Mexico and Colombia though the company is planning to expand its services to students of Spain and Brazil. In Peru, Crehana is among the learning platforms used in higher learning institutions (Warren, 2010). They offer digital and creative experts specializing in motion graphics, graphic design, 3D modeling, and digital illustration. The Bedu platform founded in Mexico has helped offer mixed-learning to students, allowing them to acquire business and programming skills. In Argentina and Brazil, there are learning institutions working to ensure all students develop digital skills. This is achieved by providing some technical courses on data science, artificial intelligence, mobile and web programming, digital marketing, and user experience.

9.11. EDUCATIONAL TECHNOLOGY IN LANGUAGE LEARNING

The education process involves children learning languages. In South America, the majority of the population is made of Spanish-speaking individuals. As English is a national language in most South American countries, the first educational technology used in language learning was focused on teaching English. Open English is the first platform used in South America and has been running for more than 10 years. The platform has been helpful ever since its establishment, as many individuals have learned English. There are many success stories in South America. Currently, there are new startup companies established in South America to help Spanish-speaking learn English. A new startup company established in Spain known as LingoKids has recorded tremendous results in helping students learn English. It has been able to grow the user base in Venezuela, Argentina, and Brazil. The company is expected to grow its base in Chile and Mexico. The company has been able to raise about 6 million dollars. The company's funding has increased to 12.5 million dollars

9.12. EDUCATIONAL TECHNOLOGY, NEXT GENERATION SCHOOLS AND TOOLS IN LATIN AMERICA

The lack of infrastructure, insufficient financing, and the inability to keep educational courses and resources in line with today's market demands drive the need for more e-learning opportunities, especially in emerging markets like Latin America. The main issue in the learning process is the cost of education. Educational technology has helped deal with those issues. One of the alternatives is the provision of Online education. This alternative is much cheaper and allows more significant numbers of individuals to get access to education. Research from online learning platforms such as UdeMy shows that most individuals taking online learning are those from areas where education is not readily available. This explains the demand for more education technology alternatives. In South America, blended learning and alternative learning methods have helped give individuals other education chances at low costs (Warren, 2005).

Some of the organizations in Peru involved in the implementation of innovative hybrid learning approaches include Lab4U. The company has created an environment where digital platforms are combined with hands-on activities. It also seeks to create a balance in that students spend equal time in traditional learning settings and online learning. In Brazil, schools are integrating the use of technology-centered in ensuring that the comfort and the well-being of learners are prioritized. Most schools use temperature controls, thermo-acoustic structures, and well-equipped classrooms. These technological modifications have proven to help improve the productivity and performance of students. Despite the numerous challenges in the education sector, various EdTech companies can innovate solutions to some problems. There are vast opportunities in early childhood education and other areas.

9.13. ROLE OF EDUCATION TECHNOLOGY

9.13.1. Supplementing K-12

Research done in Mexico and Brazil concerning K-12 education showed that Educational Technology was integrated to supplement traditional education. This is different from previous aims of replacing formal education. With K-12 education, educational technology is mainly used as an educational resource for teachers. There are few EdTechs meant for students. Most

enterprises involved in K-12 education primarily focus on teachers as they carry the major pain points. This is why most of them do not focus on creating solutions for learners. For most of these enterprises, their primary approach to offering education solutions involved them giving schools tablets. For some entrepreneurs, the main idea was to provide classrooms with tablets. These tablets were to contain academic content relevant to the grade of the student.

Most companies were able to achieve their business objective. However, they did not get the results they wanted. Further research showed that teachers play a crucial role in ensuring the tools are effective in the classroom. For instance, if there are educational games, teachers play a vital role in ensuring students understand the game and play to benefit the child. This places much emphasis on schools hiring teachers having digital skills. If the teacher is not knowledgeable on using the technology and has not received any form of training, likely, they will not use the tablet in the learning process (Valencia, 2005). As teachers didn't use the tablet, then providing tablets in classrooms was in vain as they will not be used. This shifted the focus from students to teachers. This resulted in heavy investments going to EdTech for teachers. For most entrepreneurs, the goal became the teacher. Production of technology was aimed at helping teachers with their routines, among other things. As the platforms are specially made for teachers, students can use the platform when invited by teachers.

Even though schools have purchased these technologies, they still face a lack of training among teachers. This renders them unable to use most of the platforms. These pedagogical resources are wasted as they are not used. Some enterprises have designed their product so that teachers can acquire training on how to use the technologies. One of the company's, in this case, is the Nova Escola, has designed a training and feedback system for teachers. The company has created focus groups that require teachers to register on certain websites and go through the lesson plan to find out what is offered.

The company has achieved most of its goals with its program being implemented in several districts, some of which had no computers. This has enabled elderly teachers to understand the product and how to use it. With EdTech solutions, most companies learn that both teachers and students suffer from social and economic disadvantages. This means that companies need to create the programs simply so that teachers do not acquire intensive training. If teachers do not possess skills on how to use the product, they will not use it. Companies need to ensure that the training given should

be following the EdTech solution. However, the main aim of the keys is to reinforce knowledge taught to students. Technology should not create new teachings. Among the significant stakeholders in the EdTech space are future employers though they are not usually consulted during EdTech solutions. However, creators of the solutions need to know that prospective employers play a crucial role in determining the success of the keys. This is because they will be hiring employees based on their skills and level of education. For this reason, employers should be involved in the decision-making process.

9.13.2. Replacement in Higher Education

The integration of Education Technology in the education sector was aimed at replacing traditional methods of teaching. EdTech solutions have mainly been created for higher education as it is a crucial stage in the student's life. Higher education allows the student to acquire skills needed in the workplace. In the current day and age, the workforce is seeking to hire individuals with digital skills. These digital skills are not available for individuals who go through the traditional education system (Verger et al., 2016). This is why the EdTech solutions are seeking to replace formal education systems. In other levels of learning, the solutions supplement education. The EdTech solutions are customized for higher education. In Mexico and Brazil, entrepreneurs are focused on replacing traditional education to allow students to get better preparation and support as they pursue higher education. The solutions are used in prestigious and local universities.

The type of solution created is dependent on problems faced by students in the learning process. According to studies done in Brazil, some of the issues faced by students in Brazil are as follows:

Lack of proper primary education. Even though students have studied and completed their high school education, a large percentage do not have the required level of knowledge in subjects such as math. A majority of the students studied K-12 education, and most of them are from public schools. Studies show that those students do not have the required knowledge in Portuguese and math as students are expected to have. Therefore, students going to higher learning institutions are not fit to join the next level of education.

There is also a challenge of inadequate support given to public universities. In Brazil, students can choose to pursue their higher education in public or private universities. However, most of them end up being enrolled

in private universities. This is because it is pretty challenging to join public universities. There is a lot of competition, making it difficult for a student to be accepted. This renders students from poor backgrounds unable to attend good universities as they cannot afford it. To help the situation, scholarships are given to such students though they cannot support all students. There is a fence of helplessness due to the poor management of universities. Most of them do not have proper structures, and instructors do not know students. This makes it hard for students who failed to get help.

Another challenge is numerous private universities in Brazil. In Brazil, most private universities have many students, with some going past a million, as is the case in Kroton. Over the years, numerous incentives have been placed to encourage students to enroll in Universities. Some of the stimuli were given to private schools to allow them to grow and expand. This has resulted in private schools offering easy entrance exams.

In most cases, the qualification is that the child should be able to read. Most private universities are focused on gaining profit rather than giving quality education. By so doing, the goal is efficiency. In most classrooms, there is a higher student-to-teacher ratio as many students are placed in one class.

In most cases, teachers employed are not fit for or prepared to teach. This has resulted in many students studying but getting diplomas. A majority of the students' population are from well-off backgrounds.

Most EdTech companies are working on slicing these issues. The main goal is to be the instructor or professor for students. Some of the problems in the learning process include insufficient resources for students and their instructors are not teaching them properly as required. This resulted in creating solutions such as *Estudar com Você* and *Respondi Aí* to avail content for students. These platforms can create content according to the needs of students by putting themselves in the shoes of students. They can create a platform that is interactive, efficient, clear, and engaging. New platforms are being developed every day, making students better than instructors. There are fears that EdTech solutions could disrupt the education landscape. Some think that the media may end up being integrated as learning institutions.

Chapter 10

Latin America’s Future in Education

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10.1. INTRODUCTION

Education's value in supporting a country's economic and social growth cannot be overstated. In addition to its recognized human rights, which are established in the Declaration of the Child's Rights in 1959, the Universal Declaration of Human Rights of 1948, and countless government documents and constitutions worldwide, a well-educated populace promotes sustained prosperity and growth. Investing in education is an investment in human capital—the knowledge and skills that build over years of school, training, and career development, resulting in more excellent job prospects, increased productivity, and longer economic growth (Velázquez Barriga, 2020).

Without making significant investments in citizens' education, no country can achieve long-term economic prosperity. However, it is not enough to realize the potential benefits of education while enrolling students in school is an essential initial step. In numerous studies around the world, quality education has been associated with considerable economic growth. For instance, Hanushek and Woessmann (2012) found that an increase in the standard deviation of a country's cognitive workforce is linked to a 2% increase in annual per capita GDP growth. Students develop critical skills—basic, higher-order, and socio-emotional—through high-quality instruction that coincides with workforce requirements and enables a successful entry into the labor force.



Figure 10.1: Enrollment rates in secondary and higher education have risen dramatically in recent years—ten percent in secondary school and 20% in post-secondary learning since 2000—but dropout and repeat rates have also climbed.

Source: <https://jamaicans.com/ministers-education-latin-america-caribbean-discuss-future-education-region-lead-2030/>.

Latin America and the Caribbean (LAC) region has achieved a tipping point in educational performance, strategies, and ambitions over the last two decades. In most nations, coverage has increased dramatically, particularly at the primary and secondary levels. However, the problems of inadequate educational quality and relevance continue to be significant. More children are enrolled in school in Latin America than ever before; several nations have reached universal net primary enrollment, and the regional average is 93.04%, barely three percentage points behind Western Europe and North America (UNESCO Institute for Statistics [UIS], 2017).

Students in the LAC region, on the other hand, consistently underperform their counterparts from countries with similar wealth levels on national, regional, and international assessments of education quality, failing to fulfill fundamental requirements. Moreover, high rates of admission and access conceal grave inequalities and inefficiencies at all educational systems levels. The school is less likely to attend children from low-income families, indigenous families, and rural families. If you follow, you are more likely to receive a lesser education. Countries of Latin America need to develop several new and different challenges to meet students' requirements best while at the same time developing focused responses and solutions.

Many of the region's most intractable problems—from political turmoil to sluggish economic growth, extreme violence, and mass migration—directly affect classrooms. Political instability leads to a cycle of changing political governments and ministerial appointments, which makes it challenging to build and implement a solid policy agenda (Vanegas, 2003). High socioeconomic disparity frequently prohibits low-income kids from receiving a good education, putting a lot of pressure on schools to function as instructors and as agents of broader social policy. Violence, which is a severe problem in Latin America, makes schools hazardous for pupils or prevents them from going in the first place. It also has the potential to cause dropouts and irregular migration. Students who end up dropping out of school early are more likely to commit violent crimes or join gangs, attracted by apparent financial gain and their lack of skills for the formal labor market.

According to data from around the world, enhancing academic achievement and school quality can considerably reduce violence and crime. Each extra year of education a child accomplishes reduces their involvement in the theft and violent crime by 11%, and assault and murder by 30%. Student learning impairments have a variety of economic and societal consequences that compound over time. Pupils who do not have opportunities for early childhood care, for instance, are more inclined to

leave school and receive lower wages once they reach the workplace. These complex and interconnected issues necessitate expenditures that assist kids when they face difficulties.

Human capital is abundant in Latin America, but this resource remains underdeveloped due to a lack of proper skills and education training. Only one Latin American country, Cuba, was listed among the top 50 countries with the most significant human capital development in the 2016 World Economic Forum Report on Human Capital, while eight others—Venezuela, Paraguay, Nicaragua, Honduras, Haiti, Guatemala, Dominican Republic, and Brazil—were in the worst 50.



Figure 10.2: In Latin America, the educational gap is prominent. Most children in Latin America have no access to high-quality, relevant education. Approximately 22.2 million Latin American children and youth are not in school or are about to drop out each year, according to World fund. As a result, far too many Latin American youths are unable to find decent jobs and compete in a competitive, information-rich, and globalized economy.

Source: <https://newsroom.cisco.com/feature-content?articleId=1776112>.

Learning is at the core of the matter across the region, according to the same report, which identified “a less well-educated population across all age pillars” as the biggest impediment to strengthening human capital across Latin America. As a result, maintaining the relevance and quality of educational policies and outcomes serves various economic, political, and social purposes by validating Latin American residents’ human rights,

expanding possibilities for progress, and narrowing opportunity gaps that have traditionally perpetuated inequality in the region.

The US has consistently advocated human capital development in Latin America through foreign aid through the US Agency for International Development (USAID) and many other state programs, along with private sector and non-profit activities (Torres & Schugurensky, 2002). Since 2006, USAID has invested about \$850 million in projects and efforts to improve education in Latin America and the Caribbean. In addition, the Peace Corps has dispatched approximately 70,000 volunteers to Latin America in its five and a half decades of operation to assist in sectors critical to human capital expansion, such as community, health, and education economic development.

Finally, since its start in 1949, the Fulbright Program, overseen by the US Department of State's Bureau of Educational and Cultural Affairs, has provided nearly 40,000 awards to students, scholars, and instructors across Latin America. These programs are critical in reinforcing and enhancing the United States' strong relations with its hemispheric neighbors. Furthermore, enhancing human capital growth in the region has significant benefits for US businesses. Existing gaps are a roadblock for US companies conducting business in Latin America. Many of them struggle to recruit and hire highly qualified employees for skilled and professional roles due to a lack of training. Increased human capital is also necessary for economic progress and the development of a growing middle class that will seek American services and goods.

Within this dynamic context, the United States has numerous chances to strengthen its strategic involvement with the area in ways that promote high-quality, relevant outcomes for all children. Enhance the efficiency and importance of education for Latin American youth can reveal and grow new markets for US economic interests and serve broader US efforts to improve security, reduce violence, and halt irregular migration within and out of the region. Investing in Latin American education is a critical component of achieving these goals, ensuring that the United States maintains a constructive and beneficial relationship with safe, secure, and prosperous neighbors throughout the hemisphere.

10.2 LATIN AMERICA'S EDUCATIONAL SITUATION

The region's express objective is to ensure that all inhabitants have access to education. This is aimed mainly at ensuring equal access to and retention

in the system by providing public, free educational services – commonly referred to as the lack of tuition fees – at least at the required level. Only a few countries stress the importance of quality education. Countries agree on nondiscrimination principles for all students, gender equality in treatment, and the right of people with special educational needs to obtain a high-quality education with equal opportunity. In half of the countries, public education is secular. In the other half, religious education – primarily Catholic – is provided in all schools, with teachers and parents having only limited freedom of choice in some nations. The rights of all pupils to an education that leads to achieving and reinforce their identities is rarely discussed and is usually linked to national identity. The focus is often on holistic development that contributes to personality development: expressiveness, skills, interests, and purpose.



Figure 10.3: The lack of interconnections between various systems has been identified as an issue. It's difficult to tell how much they share the same values, how they use acquired experiences and produced resources, how they systematize and assess their development, and how they refocus their efforts based on the problems they face and the progress they make.

Source: <https://www.brookings.edu/blog/education-plus-development/2013/09/27/reshaping-education-in-latin-america-through-innovation/amp/>.

Even though national constitutions declare equality in human dignity and rights and eradicate racial discrimination, most countries lack effective legislation and punishments for schools that do not comply. In

other circumstances, even if they are formed, there is no requirement for monitoring systems to exist. In some cases, the restrictions focus on specific conditions, such as discrimination against parents' civil status, pregnant students, members of ethnic groups, or people living with HIV or AIDS. Only a few nations have laws requiring attitudes and restrictions in school textbooks to eliminate stereotypes and discrimination.

Providing equal possibilities for entry to and permanency in the educational system is usually linked to ensuring the right not to be discriminated against and is represented in compensation measures for individuals who live in more vulnerable circumstances. This can be seen in target programs (especially adult education, multi-grade, special education, inter-cultural bilingual, etc.) Psychosocial and instructional activities are frequently combined in these tactics (Staab, 2010). They often collaborate with social, family, and community networks, as well as providing school money. National initiatives targeted at enhancing quality management, particularly among vulnerable groups, on the other hand, provide limited information on methods and procedures for reacting to diversity and overcoming learning and participative hurdles that are common in today's school culture and structure.

In countries with large native and Afro-descendent populations, promoting and defending the right of native groups, Afro-descendants, migrants, and other faiths and ethnic minorities to obtain an education that honors and embraces their culture and language is especially important. However, not all of them have tactics and laws to make this guarantee work. In addition, the critical role of the communities in developing proposals, although the curriculum must be adapted to each socio-cultural, ecological, and geographical context, the declarations are often not accompanied by explicit mechanisms or procedures for how curriculum diversification and adaptation processes should be implemented. The available documentation does not clarify how educational communities are included. Such participation is generally part of the decentralization management strategies, the implementation methods completed at various stages.

While teachers state that the curriculum should be adapted, information on specific requirements and mechanisms for this assignment is not supplied. Usually, rules are clear and legalistic for considering and adapting individual, cultural, and social factors to teaching. Typically, native language instruction occurs in schools located in areas with substantial indigenous peoples and during the initial years of elementary education. Extending this to multi-

cultural schools in metropolitan areas and secondary education remains a difficulty. Recognizing their ethnic, linguistic, and cultural diversity, various Latin American countries have consolidated the idea of increasing inter-cultural interaction to encourage democratic participation and social cohesion. As a result, they have integrated the cross-cutting concept of intercultural education into their national curriculum designs, which apply to all students and are not restricted to indigenous populations that do not speak the official language, as was the case previously.

In Latin America, there is widespread agreement that educational plans and programs should be relevant, considering individual variation in levels of competence, learning pace, problem-solving approaches, and motives in learning activities. Furthermore, there is agreement on the value of learners' active participation in building their knowledge. As a result, instructors should value their pupils' experiences in life and prior knowledge and encourage contact with them to pursue growing autonomy. Most Caribbean countries intend to take the required steps to assist persons with exceptional educational needs. On the other hand, few adapting the curriculum to varied contexts and cultures or specifically take gender disparities into account.

The coverage of the population aged 3 to 18 years reveals differences between countries. A total of 35 million children are not enrolled in any type of educational program. Even though primary education access rates indicate universalization, one out of ten children in the official primary education age group demographic is not enrolled. Increased access to levels before and following primary school has not been equally spectacular for all nations, with some falling short of the Education for All goals. In some nations, less than one-third of the legal age group population gets access to pre-primary schooling. Less than half of the legal age group population has accessibility to secondary school (Schoenig, 2013). The relative quantities of tertiary education enrollments vary significantly between countries, resulting in even more significant disparities, putting Caribbean countries at a disadvantage. Illiteracy rates have decreased, but at a rate that does not augur well for meeting the 2015 goal of universal education. Nearly 35 million people between the ages of 15 and 65 say they are illiterate. When paired with the almost 88 million children in the same age bracket who have not finished primary school, education reforms face a significant problem.



Figure 10.4: Educational leaders in Latino America and the Caribbean (LAC) countries learn without a precedent of such a large-scale interruption from the widespread experience of the region in mass media education. Receiving the rich tradition and helping LAC countries to deal with the current educational crisis, the World Bank organized a wide consultation. During this crisis, countries adopt innovative and flexible methods. They incorporate different teaching and learning channels and media.

Source: <https://blogs.worldbank.org/education/how-countries-across-latin-america-use-technology-during-covid19-driven-school-closures>.

The completion rates of primary education suggest that the area has made progress toward globalization. However, this is not a topic that can be dismissed. More than one out of every five youngsters still do not complete primary school in some nations. Furthermore, 4.5 million young people aged 15 to 19 have not finished this level. Several Central American countries have the most challenging problems in terms of universal primary school completion. In reduced secondary education completion, several countries can assure universal finalization based on present completion patterns. However, in some cases, this proportion does not exceed 70%. Taking all countries together, the area has not ensured that more than 14 million people aged 20 to 24 have completed this level.

Only a few countries have the conditions to ensure that all working-age citizens complete upper secondary school, while this is a distant prospect for many others. With approximately 25 million people who have not completed upper secondary education, several countries have lower than 50% completion rates. It is also worth noting that in several Central American countries, even among the wealthier sectors, completion rates for upper secondary school are poor, indicating additional issues for the

country. A theme should be promoted to participate in international studies to evaluate learning with minimum criteria to ensure comparability and reliable results. Previous research involving all the countries in Latin America and international studies in which some were involved revealed significant hurdles, both compared to (mostly) absolute, due to poor performance. These tests show that no minimum results are achieved for many of the population in the study fields.

There is no equal distribution of current issues to these critical issues as the universal completion of primary education. In disadvantaged groups, the level of the conclusion is lower systemically. In this way, educational inequalities combine with other inequalities, forming a complex set of social exclusions that deny education's fundamental objective linked to equal opportunities among individuals. The information available shows that educational systems could not reverse social inequalities but reproduce them (Somers et al., 2004).

10.3. THE FUTURE AND CURRENT OPPORTUNITIES FOR EDUCATION IN LATIN AMERICA

achievements and present difficulties facing national educational institutions across LAC, and how academic performance and policy contexts interact to determine the setting in which countries operate? Almost every country in Latin America receives some type of foreign aid or support, whether through bilateral development initiatives, multilateral development agency financing, or technical assistance awards. This outside assistance has a substantial impact in three ways:

- These interventions can concentrate scarce resources in particular areas and hence have more clout because they are strategic in focus.
- By utilizing other sources (e.g., international or national private sector money) to expand education funding across the board.
- By offering technical assistance that improves the ability to deliver policies and programs and, as a result, has a large-scale impact.

Recent and current financing trends reveal who the major players in the LAC education industry are, their objectives, and how their techniques have developed with time. By overlaying, comparing these trends, and the facts and figures from a regional expert survey, with the type defined in the

preceding section, several patterns emerge based on the educational context and variety, and the amount of help it receives and who receives it. This section aligns with several trends in financing for the country categories developed in typology by multilateral and bilateral agencies. These models help identify where companies (i.e., countries) invest, how much they support, and how much they invest (i.e., what educational levels and priority areas). In the region, the World Bank and the Inter-American Development Bank (IADB) are the most significant contributors to education development funding and loans, both in terms of the level of commitment and of the number of countries that are being approved.



Figure 10.5: The main heroes of the education systems of Latin America are unsung. There are few programs specifically designed to help, and no studies are available to support their efficiency (most of them have been implemented for a relatively period, even sporadically). This is an area which must be developed further, and the lessons that other countries can learn from recent experiments from Peru and Argentina should be investigated.

Source: <https://www.thedialogue.org/blogs/2018/05/70401/>.

From 2014 to 2016, the IADB agreed on average over \$1 bn in education financing in this area – a slight decrease from the last decade when the average was around \$1.3 bn. In the meantime, the World Bank, over the period from an average of \$403 million a year ten years ago, to an average of \$ 862 million per year from 2014 to 2016, more than doubled its financial support for education programs Latin America and the Caribbean. Although

the CAF-Latin American Development Bank, the third international entity operating in LAC, has spent much less on training than its peers, education expenditure in recent years has been dramatically expanded (Senechal, 2010).

From 2006 to 2008, CAF committed an average of \$16 million each year to educational projects. By 2014–2016, however, the amount had nearly tenfolded to 142 million dollars. However, the apparent growth is attributable primarily to the approval of several big projects rather than the growth of the CAF education sector to new nations and/or areas of focus. The United States Agency for International Development (USAID) obligations are more minor yet substantial. Compared to other multinational countries, USAID has committed a small but constant amount of money to educational programs in LAC, averaging just under \$70 million per year between 2014 and 2016.

Over the last decade, the funding of USAID for Latin America's elementary and higher education has changed extraordinarily little from a low \$51.7 million in 2007 to a high of \$86.3 million in 2010.

USAID is one of the key participants in countries in which it is involved in the development of projects – El Salvador, Nicaragua and Honduras, Guatemala, Dominican Republic, and the Eastern and Southern Caribbean countries. The World Bank, for example, invests ten times more in education in the region than USAID does.

However, USAID support is nearly twice as high as the World Bank's in the six nations and sub-regions with effective education programs. Similarly, while the IADB invests fifteen times as much in education as USAID does regionally, the IADB only invests three times as much in the countries where USAID currently works. While USAID has prioritized operations in a small number of nations across the area, most multilateral opt to focus on a considerably more significant number of countries, practically all of which receive substantial financial approvals. There have been numerous considerable focus adjustments in the education sector over the last decade, most notably shifting significant investment towards secondary and pre-primary schooling and aside from primary and higher education. Around 10 years ago, elementary education projects received over 40% of all education approvals from major multilateral for Latin America. Today, that funding share has decreased nearly fifteen percentage points to 26%.

Secondary education funding currently accounts for 25% of all multilateral approvals, compared to only 14% a decade ago. The most

significant increase has been in financing for pre-primary education, which accounted for only 3% of all funding a decade ago but has already earned 15% of all budget approvals in recent years. Infrastructure and Adult education, which accounted for only a tiny fraction of total investment a decade ago, have received little money in recent years. In contrast, cash for Technical and Vocational Education and Training and skills development and the general education sector has been stable as a share of all multilateral investment (Ross Schneider, 2021).

However, this financial shift is not wholly unexpected. It is only natural that, as primary education has become nearly universal, this sub-sector has become less of a priority. Meanwhile, as the number of students enrolled in pre-primary and secondary education has grown, these sectors have gained more attention from development professionals and policymakers. Furthermore, experts see secondary and pre-primary schooling is vital for the area, implying broad agreement among governments, donors, and professionals on the necessity of giving children a great educational start and guaranteeing they have the knowledge and capabilities needed to succeed in the workplace.



Figure 10.6: The school systems in Latin America and the Caribbean (LAC) face significant issues. How are governments expected to encourage equal access to education? What are the most successful policy methods for reducing the impact of a student's relative disadvantage on academic performance? How soon should we intervene to address performance disparities?

Source: <https://www.a-id.org/2015/01/13/why-latin-america-primary-education-is-so-bad/>.

The IADB has specifically started to provide loans in education for university studies to increase professionalism by 7% points decrease in higher education funds over the past decade, since this is not a priority under any of the existing strategic plans of the multilateral institutions and that IADB explicitly regards this as “second priority.” The quality of education and early learners are the focus of sectoral strategy papers.

The strategic documents of each developing bank serve as a plan to set goals, lead investment and funding decisions, and track progress toward long-term objectives, just as the national education plans outlined before lead and lead the government’s actions and vision. The IADB adopted a sector framework document in 2016 that focused on five aspects of success:

- Establish, evaluate, and track high learning objectives.
- Students approach the system with an open mind and a desire to learn.
- Effective teachers are available to students.
- Schools have and use the resources that they require.
- Students learn the skills they need to succeed in life.

The IADB also recognizes so many critical areas in which they have a strategic advantage, along with a five-decade dedication to the region, involving a comprehensive network of local staff. The IADB establishes relations and matches the country’s needs with technical knowledge to improve its results. Furthermore, early childhood education is the only level explicitly mentioned in the IADB’s current education system policy document’s five general aspects of success (Dimension 2: Students enter the system ready to learn). All the other dimensions are sufficiently broad to accommodate any learner at any educational level. Early childhood has been expressly mentioned indicates its importance to the bank and its educational aspirations.

This has resulted in pre-school and early childhood education receiving 42% of all approved IADB education expenditures for “weak outcome” nations in the last five years, and primary education receiving 57%, accounting for 99% of all IADB funding to countries with the worst educational performance (Robert, 2012). Although the World Bank’s education sector plan is not particular to its operations in Latin America, it does provide valuable insight into the organization’s educational priorities for the region. Its objective is to improve the quality of the learning results as the overall aim of all educational initiatives and to use system investments, building

up and supporting a broader knowledge base around quality standards and country contexts to provide programs and initiatives.

At the CAF, the 2016–2020 Education Agenda sets targets and steps to achieve these goals. Three key concepts focus on objectives:

- Increase access—particularly to vulnerable and marginalized populations.
- Improve education quality.
- Strengthen the relevance of education to students, particularly about their future labor market participation.

The United States Agency for International Development (USAID) is the largest bilateral donor to education in Latin America. USAID is the most significant single contributor to education funding in the region among bilateral agencies. Although both AECID, the Spanish government's development agency, and CIDA, the Canadian assistance agency, used to contribute to education in the region at levels equivalent to USAID's, both organizations have discontinued or drastically decreased financing in the last five to ten years, while USAID's funding approvals have stayed stable. From 2013 to 2015, the most recent years for which information is available, AECID, which used to provide up to twice as much as USAID in some years, averaged only 19.5 million euros in financing annually. Peru and Bolivia received the most country-level support from AECID, with significant contributions to Nicaragua, Honduras, Guatemala, Ecuador, and Brazil.

Moreover, CIDA, which contributed an average of \$58 million to educational initiatives in Latin America from 2009 to 2011, reduced its commitment to only \$21.2 million from 2014 to 2016. During this time, it has also limited the number of nations to which it has made large aid payments. Haiti received more than a third of all Canadian development money for education since 2007. Of course, considering Haiti's tremendous poverty and the horrific hurricane country endured in 2010, this is unsurprising. However, CIDA has approved education initiatives worth more than \$10 million in Colombia and Peru in recent years.

In addition to Spain and Canada, the assistance agencies in the LAC Region have also contributed to educational development from Switzerland, Sweden, South Korea, Japan, Germany, France, and the United Kingdom. However, their contributions remain far lower than in the United States and sometimes are limited to a small handful of nations (RamírezPlascencia, 2018). USAID's commitment in Latin America is guided by the principles

outlined in its Global Education Strategy, which requires all USAID initiatives to address at least one of three objectives:



Figure 10.7: Most of these countries are in Central America, namely Honduras, Guatemala, and El Salvador, which form the Northern Triangle. USAID operates education projects in four of the five nations with both a weak policy environment and poor outcomes.

Source: <https://www.thedialogue.org/blogs/2019/04/latin-americas-lowest-performing-education-systems/>.

- Enhanced equitable access to education in crisis and conflict situations.
- Expanded access to education for all people in crisis and conflict situations.
- Enhanced workforce and tertiary development programs' ability to create workforce skills relevant to the development of a country.

With this focus on primary education, technological and professional secondary training, employment training, and capacity-building, USAID chose to concentrate on primary school (when literacy skills are established) for that already informal education, and emergency education and conflict programming in central America, where gender violence and violent crime is a big problem. The United States Agency for International Development (USAID) has chosen a strategy that focuses on nations with the worst educational performance and weakest policy conditions.

Furthermore, USAID has bilateral projects in two of the nine nations with weak policy environments or educational outcomes, and the Southern and Eastern Caribbean regional program covers five more. With the end of its program in Peru, USAID today has no initiatives in nations with solid policy or outcomes, which is understandable given the agency's strategic aims. Nonetheless, most countries in the LAC area do not belong to the sub-group of countries with poor results and moderate policy conditions. Although USAID's funding and attention devoted to the world's poorest countries is commendable, other chances are to seek collaborations in other countries.

The United States Agency for International Development (USAID) continues to be a valuable partner in the region. In recent years, USAID has decided to concentrate its efforts on a smaller number of initiatives and countries, many of which have direct and strong ties to US national security policy. USAID's work in these sectors is well-known and regarded as beneficial to the region's educational growth. According to an Inter-American Dialogue survey of education professionals working in a wide range of roles and sub-sectors, the most fruitful areas of present partnership include USAID initiatives concentrating on educational quality, primary education, and at-risk or out-of-school kids.

Many of the critiques leveled against USAID were based on the belief that there was insufficient funding or that projects had not been scaled up to have maximum effectiveness. Although inefficiencies in the US and local government bureaucracies were mentioned as an ongoing issue, there was no perception that USAID projects were either unneeded or focused on areas of limited need or importance.

Education will become an even more pressing development concern in the future. The Latin American region is currently confronted with severe development issues, the most notable of which are poor economic growth and considerable productivity and human capital limitations. Indeed, following a long period of rapid economic growth, the economies of Latin America's countries have slowed—and in some cases declined—in recent years.



Figure 10.8: Over the last two decades, our ability to measure the relevance of education with increasing precision has demonstrated the critical significance of education in social and economic growth. Knowledge and technical skill, which are the outcomes of good education and contribute to improved revenues and production, are critical to a country's development.

Source: <https://www.weforum.org/agenda/2015/05/how-can-we-transform-education-in-latin-america/>.

Except for Haiti, nearly every country in the region has succeeded in transitioning from a low-income to a middle-income (though low-middle-income) economy; recent growth trends indicate that the area will remain in the middle-income “trap” for the near future. Furthermore, compared to more sophisticated countries, labor productivity in LAC has been dropping over the last decade. Developing productive capacity is a critical step towards enhancing the region's financial prospects and resolving these issues. Currently, the informal sector employs more than half of LAC's workforce.

This fuels a vicious cycle of insecure employment, good employment turnover, little expenditure in employee training and education, and, as a result, low productivity. These disadvantages make it difficult for companies in the formal sector which demand a better-qualified workforce to find candidates who fulfill their requirements. LAC has the most significant

skills supply and demand imbalance. The industries with the most difficulty finding skilled workers—automotive and machinery—require a high level of technical knowledge and specialized abilities (Poppema, 2009).

LAC countries must equip a more significant portion of their population with critical capabilities and knowledge to encourage economic growth and development. These are the possibilities and forces that either propel or suppress LAC following policies and programs. Investment in education is critical to any country's economic growth and productivity; international studies show that a further year of education can increase the GDP by up to 0.37% and improve an individual's livelihood by up to 10%. As a result of these trends, Latin American countries will face growing pressure to enhance the efficiency of their educational systems as a prerequisite for developing the essential human capital for their workforce. As a result, education policy and investment will become more prominent in government decision-making.



Figure 10.9: Even though many countries in the region have made great progress in recent years in reducing income inequality, the richest decile of Latin Americans still owns 71% of the region's wealth. Low-income families are currently facing extraordinary hardships because of the region's socioeconomic inequality and the COVID-19 problem.

Source: <http://wunicon.org/events/rio-conference-report>.

The United States should assess its engagement plan to achieve that it is in line with strategic objectives and maximizes effectiveness. As countries in Latin America confront growing pressure to improve education outcomes in the future years, the United States will face the problem of figuring out

how to participate in the change effectively. Depending on how the matter is handled, education in Latin America could either become a productive area of cooperation that benefits both sides or a declining area of collaboration that is more perceived as part of US humanitarian relief efforts rather than a vital part of the country's strategic international relations.

There are many important factors to consider in developing a strategy for US engagement with the Latin American education sector: Which questions should be answered, where and how? What. What 'what' is meant by the investment field (e.g., early childhood, literacy, workforce development, etc.) and education level (pre-primary, primary, secondary, tertiary, non-formal). "Where" is an assessment of which countries, precisely which groups of countries: those with the highest needs but most deficient policy environments, and those with a more robust political environment and educational outcomes and therefore less risk. The term "how" refers to the process of determining which form of assistance system will be most successful and how it should be implemented. Should it, for instance, focus on software (such as knowledge, capacity building, and technical cooperation) or hardware (such as infrastructure, school supplies, and technology)?

Developing skills gives you more opportunities to distinguish yourself from competing organizations.

USAID's final strategic goal is an area of potential future growth in both the countries where the organization is active and throughout the region. "Extending the capacity of tertiary and workforce development programs. LAC nations, particularly those where USAID works, suffer significant productivity issues. Human capital development is not the only obstacle to solving these problems, but it is substantial. In combination with the region's existing demographic dividend, such as high dropout rates and unemployment rates, the Convergence of factors produces a working-age population bubble. Yet, many youngsters cannot make use of these productive prospects.

Experts in the Inter-American dialog poll mentioned talent and skills development in the countries where USAID is essential and valuable for the region as two areas of vulnerability. For example, in countries where USAID is funding educational programs, the highest priority is to invest in technical secondary education regarding the most appropriate education level.

In addition, practically all LAC nations that work in USAID, except those in the Eastern Caribbean, Nicaragua, Honduras, Guatemala, Salvador, and

the Dominican Republic, are listed in the lowest portion of the 2017 Global Talent Competitiveness Index. All USAID nations, except for Venezuela and Bolivia, are listed in the lowest rating in the area. From a demand standpoint, Honduras, Guatemala, and Barbados have a more significant percentage of enterprises identifying poorly qualified people as a severe difficulty than the LAC average. Along with the Dominican Republic, these countries are among the top 25% of the world's population.

Moreover, in numerous countries, USAID is not only filling a proven necessity but is also the major actor in this region of involvement. As previously stated, the IADB devotes the great bulk of its funding to pre-primary and primary education in countries where USAID is operating. In the last five years, the World Bank, which invests less money in these nations than USAID, has approved less than 20% of secondary and tertiary education projects. Moreover, the World Bank's long-term educational obligations in nations where USAID may not always focus on advancing analytical education and employment – many also concentrate on frequent secondary school education. CAF has made one of three key focus areas of their current strategic plan, including workforce development amongst the central development banks.

On the other hand, CAF does not yet have any programs in areas where USAID sponsors programs and initiatives; this shared thematic engagement, but geographically different commitment, allows for information sharing between organizations and initiatives without overlapping efforts. Skills development opens more options to participate in a more significant number of countries. Workforce and skills development projects are also appealing to a broader number of nations in Latin America, in addition to those where USAID is currently active.

Almost every country in Latin America is experiencing a human capital shortage, and private companies in the area are having trouble filling vacancies for scientists, engineers, and skilled craft employees. This is true in both the nations where USAID now runs programs (Guatemala) and the countries of the Latin American and Caribbean (LAC) (Peru, Panama, Mexico, Costa Rica, Colombia, Brazil, and Argentina). Furthermore, existing programs in many of these nations enroll far too few students to fulfill industry demands.



Figure 10.10: Numerous studies suggest that the intellectual and cognitive skills necessary for success in elementary school and beyond are established during a child's early years. While Latin America has made significant progress in lowering child mortality and malnutrition, educational chances for children aged three to six remain inadequate.

Source: <https://www.pinterest.es/pin/201676889540092983/?send=true>.

In Brazil, the Dominican Republic, Nicaragua, and Peru, less than 5% of second-year students are registered in TVET programs. Skill shortages are also critical for postsecondary students and those who drop out before finishing their secondary education, which USAID can address by actively participating in and developing simple workforce development initiatives. To put it another way, while early efforts should be focused on nations with the greatest needs and USAID has already financed education initiatives, the potential for development is undeniable.

Modifications to the business model will be required. Adopting a more forward-looking strategy for USAID education projects in LAC that focuses on growth and expansion opportunities will undoubtedly necessitate some changes in business practices. Most importantly, the current limited engagement approach—working around policy actors and government institutions—will become more challenging to implement. More meaningful goals and a more wide-ranging and direct effort to leverage relationships beyond USAID would inevitably need more contacts with systems and institutions (Patron, 2006). This is not to imply that USAID should abandon its programmatic approach in favor of a more policy-oriented approach or

try to effect systemic change through programs. Instead, understanding the importance of interacting with these systems is crucial for achieving larger goals. Furthermore, an opportunities-oriented strategy will necessitate a more extensive network of partners and a broader toolkit of capabilities than those currently available to USAID. Many of these possible partners and requisite talents, as previously mentioned, are simply recognized and developable. To focus on regional prospects more generally, a shift in mindset and priorities is required.

Even though USAID is already active in the highest-need nations and settings and has created a specific methodology to address higher risks, there are still several areas where USAID has the chance to work in sub-sectors and governments that are not presently a goal for other development organizations or banks. An increasing focus on skills development not only helps USAID achieve its regional goals, but also provides opportunities for other US actors, both inside and outside the government. Moving in this path does not negate the necessity of investing in primary education and schools and communities affected by violence, crises, and war. The United States Agency for International Development (USAID) should promote this goal, notably through advocacy. What USAID should think about is how it can expand effect, utilize new opportunities, and ensure equity, prosperity, and peace throughout the Americas by shifting its focus and *modus operandi*.

10.4. CONCLUSIONS

Education growth is financed within more significant economic and social circumstances. Economic shocks and resulting fiscal adjustments, such as those seen in several Latin American countries in recent years, can have an immediate influence on educational resources and the distribution of public and private spending. Individuals and households are affected by the economic ramifications of general spending patterns (Payne et al., 2002). As a result of dropping real wages and unemployment during periods of economic instability, household resources and private donations to education may dwindle. As families explore ways to supplement their income, the potential cost of tuition can rise. Economic instability limits the available resources for education from both a governmental and private perspective.



Figure 10.11: Governments have implemented a variety of strategies to lower cost barriers to lessen this danger and provide higher education options for the poor. At the same time, this raises concerns about access inequity and challenges related to effective targeting of underprivileged kids.

Source: <http://www.ipsnews.net/2016/07/latin-american-development-depends-on-investing-in-teenage-girls/>.

Repetition costs hinder the development of educational standards in many Latin American countries. Much progress has been achieved in raising the amount of schooling available in LAC nations, but it has been hampered by the breadth and costs of efficiency losses. This emphasizes the need of preserving and strengthening primary education while also aiming to extend educational opportunities at higher levels. While policies aimed at reducing repetition will allow resources to be better targeted at the intended school-age population, they should not be at the expense of learning outcomes.

According to international accomplishment studies, Latin American countries' quality lags countries with equal national income levels. In terms of educational expansion, equity considerations are crucial. While growth may appear to imply better access and hence increased equity, the survey data previously mentioned suggests that the benefit is restricted at higher levels of education (Parra, 2009). The balance between public and private finance can often shift when postsecondary education has been shown to generate more significant returns at the individual level in the form of increased incomes. Some governments attribute increased obligation for supporting postsecondary and even secondary education to households and individuals to represent this change in benefit. Over-reliance on private contributions, on the other hand, threatens exclusion.

Bibliography

1. Alzúa, M. L., Gasparini, L., & Haimovich, F., (2015). Education reform and labor market outcomes: The case of Argentina's ley federal de educación. *Journal of Applied Economics*, 18(1), 21–43.
2. Angell, A., (2002). The politics of education reform in Chile: The programa 900 escuelas and the MECE-básica. In: *Social Policy Reform and Market Governance in Latin America* (pp. 147–164). Palgrave Macmillan, London.
3. Arrueta, J. A., & Avery, H., (2012). Education reform in Bolivia: Transitions towards which future? *Research in Comparative and International Education*, 7(4), 419–433.
4. Balán, J., (2006). Reforming higher education in Latin America: Policy and practice. *Latin American Research Review*, 41(2), 228–246.
5. Behrman, J. R., Gaviria, A., Székely, M., Birdsall, N., & Galiani, S., (2001). Intergenerational mobility in Latin America [with comments]. *Economia*, 2(1), 1–44.
6. Bonal, X., (2007). On global absences: Reflections on the failings in the education and poverty relationship in Latin America. *International Journal of Educational Development*, 27(1), 86–100.
7. Brandhorst, A. R., (2011). Multicultural education reform movement. *Teaching and Studying Social Issues: Major Programs and Approaches*, 3, 217.
8. Cortina, R., (2013). *The Education of Indigenous Citizens in Latin America* (Vol. 95). Multilingual Matters.

9. Chang, E., (2019). A politics of redaction and racial justice in digital education reform. *Harvard Educational Review*, 89(2), 289–313.
10. Cole, E. A., & Murphy, K., (2009). History education reform, transitional justice, and the transformation of identities. *Research Brief, International Center for Transitional Justice*.
11. Cox, C., (2013). Fraternity and educational reform in Latin America. *Clarita's: Journal of Dialogue and Culture*, 2(2), 11.
12. Creighton, M., & Park, H., (2010). Closing the gender gap: Six decades of reform in Mexican education. *Comparative Education Review*, 54(4), 513–537.
13. Friedrich, D. S., (2014). Global microlending in education reform: Enseñá por Argentina and the neoliberalization of the grassroots. *Comparative Education Review*, 58(2), 296–321.
14. Fernández-Arias, E., & Montiel, P., (2001). Reform and growth in Latin America: All pain, no gain? *IMF Staff Papers*, 48(3), 522–546.
15. Gamboa, L. F., & Waltenberg, F. D., (2012). Inequality of opportunity for educational achievement in Latin America: Evidence from PISA 2006–2009. *Economics of Education Review*, 31(5), 694–708.
16. Gasperini, L., (2000). *The Cuban Education System: Lessons and Dilemmas* (Vol. 1, No. 5). Country Studies: Education Reform and Management Publication Series.
17. Gershberg, A. I., González, P. A., & Meade, B., (2012). Understanding and improving accountability in education: A conceptual framework and guideposts from three decentralization reform experiences in Latin America. *World Development*, 40(5), 1024–1041.
18. Graham, P. A., (2002). Educational Reform: Why Now? *Proceedings of the American Philosophical Society*, 146(3), 256–263.
19. Howard, R., (2009). Education reform, indigenous politics, and decolonization in the Bolivia of Evo Morales. *International Journal of Educational Development*, 29(6), 583–593.
20. Hooker, J., (2005). Indigenous inclusion/black exclusion: Race, ethnicity and multicultural citizenship in Latin America. *Journal of Latin American Studies*, 37(2), 285–310.
21. Gvirtz, S., (2002). Curricular reforms in Latin America with special emphasis on the Argentine case. *Comparative Education*, 38(4), 453–469.

22. Hutt, E., & Polikoff, M. S., (2020). Toward a framework for public accountability in education reform. *Educational Researcher*, 49(7), 503–511.
23. Keen, B., & Haynes, K., (2012). *A History of Latin America* (Vol. 2). Cengage Learning.
24. Knoeppel, R., & Brewer, C., (2011). Education Reform, equal opportunity and educational achievement: Do trend data adequately report progress? *Education Policy Analysis Archives/Archivos Analíticos de Políticas Educativas*, 19, 1–31.
25. Lustig, N., López-Calva, L. F., & Ortiz-Juarez, E., (2013). *Deconstructing the decline in inequality in Latin America*. World Bank Policy Research Working Paper, (6552).
26. Luque, J., (2017). Honduras: Contemporary education reform. *Education in Mexico, Central America and the Latin Caribbean*, 35, 191.
27. Manacorda, M., Sánchez-Páramo, C., & Schady, N., (2010). Changes in returns to education in Latin America: The role of demand and supply of skills. *ILR Review*, 63(2), 307–326.
28. Matos, C., (2016). Media reform in Latin America revisited: where do we go from here? In: *Global Media and National Policies* (pp. 156–172). Palgrave Macmillan, London.
29. Meade, B., & Gershberg, A. I., (2008). Making education reform work for the poor: Accountability and decentralization in Latin America. *Journal of Education Policy*, 23(3), 299–322.
30. Mizala, A., & Schneider, B. R., (2014). Negotiating education reform: teacher evaluations and incentives in Chile (1990–2010). *Governance*, 27(1), 87–109.
31. Nygreen, K., (2016). Competing paradigms of educational justice: Parent organizing for educational equity in a neoliberal reform context. *Equity & Excellence in Education*, 49(2), 202–214.
32. Parra, J. D., (2009). Education reform in Latin America: Equal educational opportunity? *Gist: Education and Learning Research Journal*, (3), 134–157.
33. Payne, J. M., Zovatto, D., Flórez, F. C., & Zavala, A. A., (2002). *Democracies in Development: Politics and Reform in Latin America* (Vol. 1). Idb.

34. Patron, R., (2006). Enhancing the public provision of education: The economics of education reform in developing countries. *Documento de Trabajo/FCS-DE; 11/06*.
35. Poppema, M., (2009). Guatemala, the peace accords and education: a post-conflict struggle for equal opportunities, cultural recognition and participation in education. *Globalization, Societies and Education*, 7(4), 383–408.
36. Ramírez, P. D., (2018). Education reform, teacher resistance, and social media activism in Mexico, 2013–2016. In: *The Educational Forum* (Vol. 82, No. 3, pp. 321–334). Routledge.
37. Robert, S. A., (2012). (En) gendering responsibility: a critical news analysis of Argentina's education reform, 2001–2002. *Discourse: Studies in the Cultural Politics of Education*, 33(4), 485–498.
38. Ross, S. B., (2021). Teacher unions, political machines, and the thorny politics of education reform in Latin America. *Politics & Society*, March 2021. Doi:10.1177/00323292211002788.
39. Senechal, D., (2010). The most daring education reform of all. *American Educator*, 34(1), 4–16.
40. Somers, M. A., McEwan, P. J., & Willms, J. D., (2004). How effective are private schools in Latin America? *Comparative Education Review*, 48(1), 48–69.
41. Schoenig, J., (2013). Parental choice, Catholic schools, and educational pluralism at the dawn of a new era in K-12 education reform. *Notre Dame JL Ethics & Pub. Poly.*, 27, 513.
42. Staab, S., (2010). Social investment policies in Chile and Latin America: Towards equal opportunities for women and children? *Journal of Social Policy*, 39(4), 607–626.
43. Torres, C. A., & Schugurensky, D., (2002). The political economy of higher education in the era of neoliberal globalization: Latin America in comparative perspective. *Higher Education*, 43(4), 429–455.
44. Vanegas, P., (2003). The Northern influence and Colombian education reform of the 1990s. *Crisis and Hope. The Educational Hopscotch of Latin America*, 227–250.
45. Velázquez, B. L. M., (2020). Education reform in Mexico: Teachers' struggle for a grassroots educational project. *Handbook on Promoting Social Justice in Education*, 1405–1423.

46. Verger, A., Fontdevila, C., & Zancajo, A., (2016). *The Privatization of Education: A Political Economy of Global Education Reform*. Teachers College Press.
47. Valencia, R., (2005). The Mexican American struggle for equal educational opportunity in Mendez v. Westminster: Helping to pave the way for Brown v. Board of education. *Teachers College Record*, 107(3), 389–423.
48. Warren, M., (2005). Communities and schools: A new view of urban education reform. *Harvard Educational Review*, 75(2), 133–173.
49. Warren, M. R., (2010). Community organizing for education reform. *Public Engagement for Public Education*, 139–172.

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Handbook of Education Systems in South America

South America still lags back in education, notwithstanding having some of the richest countries in the world. The percentage of 10-year-olds not able to read and write may also have grown from 51% to 62.5%. This may be equal to 7.6 million students missing out on education. These figures indicate that governments must act without delay to reverse the scenario. Nations have to put together resources for the effective equipping of schools national, with crucial funding and equipment, these schools can make great progress in society. Policies should focus on making sure that every school-going child has access to quality education, and improving the conditions for effective learning, which becomes the new normal in the coming years. In South America, fewer than 43% of primary schools and fewer than 62% of secondary schools have access to the internet for educational purposes. It's important to close the digital divide that persists, and to use the current Covid disaster to reexamine the education sector and make meaningful changes where possible. The chapters covered in this volume include: Chapter 1: Introduction to Educational Systems in South America; Chapter 2: Educational Indices in South America; Chapter 3. Literacy Rate in South America; Chapter 4: Educational Attainment in South America; Chapter 5: Education Programs in South America; Chapter 6: Educational Labor Unions in South America; Chapter 7: Educational Gender Gap in South America; Chapter 8: Trends in Distance Education in South America; Chapter 9: Rise of Educational Technology in South America; and Chapter 10: Latin America's Future in Education.

In the long run, the intention is to establish education systems that are extra inclusive, effective and resilient. Different examples of effective education exist that can be institutionalized and replicated within the country. These consist of early warning systems that help identify students who are vulnerable to losing out in education in Chile, Peru, and Guatemala. Likewise, education management systems are generating a huge impact in Colombia and Uruguay. Additionally, the adaptive technologies utilized in Ecuador and the Dominican Republic have helped to offer practice on the right stage. Without proper education, losses may be encountered in widening of the already massive socio-economic gap by up to 12%. Widespread losses in education, human capital and productivity may additionally translate into a decline in household income for the region by up to \$1.7 trillion, or approximately 10% of overall baseline revenue. Adding to these bad effects is that the rate of student dropouts may increase by around 15% due to the current pandemic, as well as the interruption of other essential services that many students received in schools, such as free meals that fed approximately 10 million students in the continent.

These factors will have dramatic effects on the students' physical, cognitive, and emotional wellbeing. The volume suggests that if South America is to provide quality education for all, governments must do more to improve school infrastructure, as well as teacher and student conditions. Rural and poor communities are especially vulnerable to low education standards and must be protected.



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