

**EXECUTIVE  
SUMMARY**

# DISCONNECTED

**SKILLS, EDUCATION AND  
EMPLOYMENT IN LATIN AMERICA**



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## Contents

1. The World Ahead .....	1
2. Outlook for Youth Employment in Latin America: Cloudy .....	3
3. The Education System: Quantity without Quality .....	7
4. Looking for Clues: Where and When Are Cognitive and Socio-Emotional Skills Developed? .....	11
5. A Skills Factory? What the Educational System Provides .....	13
6. Demand for Skills: Employers Speak.....	19
7. Rethinking Schools for the Contemporary Labor Market .....	23
References .....	27





# The World Ahead

*The future of the world lies in its youth.* Type this short sentence into an online search engine, and you will get millions of results. The wording of each might be slightly different, but the sentiment is the same: “The young are our future.” It is simultaneously a cliché, a known truth, and an enormously loaded sentence. In a region like Latin America—where few students have access to university and most young people enter the workforce from secondary school, often before graduating—how are the young being prepared to play their part as full members of the “future of the world”?

This is precisely the question that this publication addresses. The authors focus on how secondary students (graduates and nongraduates) transition from school to the workforce. In a complex, demanding, and globalized labor market, what opportunities do they have? With access to education growing massively in the region—and faster than the number of jobs—how will they compete?

Today, young Latin Americans who decide to enter the workforce from secondary school start out at a disadvantage. The tools they bring with them are basically those that they acquired in school. Families, too, play an important role, but schools bear the primary responsibility for ensuring that students gain the skills and competencies they need to succeed at work and in society at large. The diagnostic presented in this book indicates that this is not happening.

What evidence points to the conclusion that the Latin American educational system is not doing its job? For one thing, the transition between secondary school and the workplace is more difficult for today’s youth than it was for their counterparts just a few decades ago. And the skills acquired in high school are less valued by employers than they once were, as evidenced by the significant drop in the premium paid to workers who have completed secondary education compared with those with lower levels of education.

But, to what extent is this phenomenon the expected result of the massive increase in the supply of young Latin Americans that achieve this level of studies? How do quality and relevance of the education they receive have an

impact? The figures show that while the region has been closing the gap in its access to education against developed economies, it maintains disturbing gaps in terms of quality—as measured by the results of international tests—and the domain of basic knowledge. To this, we should add the apparent mismatch between the skills shaped by today's schools and those that the labor market really demands from young people who move directly there from high school.

With the analysis of first-hand information collected through two major surveys—one on trajectories and skills conducted in Chile and Argentina in 2008 and 2010 respectively, and another one on demand for skills conducted among representatives of the business sector of Argentina, Brazil and Chile in 2010—the authors show that urgent educational policies are required not only to address the problem of quality in education but its relevance when it comes to facilitating the transition of young people to the labor market.





# 2

## Outlook for Youth Employment in Latin America: Cloudy

One of the major developments in the labor market in Latin America over the past two decades has been the drop in the returns to secondary education, a trend well documented in the labor economics literature for the region (and discussed in chapter 2)<sup>1</sup>. Meanwhile, the premium paid to workers with post-secondary education has risen (figure 1). The explanation of these facts lies, on the one hand, in the general increase in the relative supply of workers with secondary education, and, on the other hand, in an increase in demand for workers with higher education that has not been accompanied by growth in supply. The increased demand for educated workers stems from technological advances that require, as complements, the type of skills possessed by educated people and from changes provoked by trade liberalization and other policy reforms implemented since the late 1980s.

Something the labor economics literature has not addressed, however, has been the relationship between the events noted above and the quality of education in the region. Beyond the documented supply and demand factors, to what extent has poor training in secondary schools—if it is in fact poor—contributed to the relative losses recorded for workers with secondary education?

Evidence from the United States, which had a similar wage spread across different educational groups during the 1980s, suggests that the demand for skills changed as new technology replaced routine tasks once performed by workers with secondary education. With that change, the structure of the U.S. labor

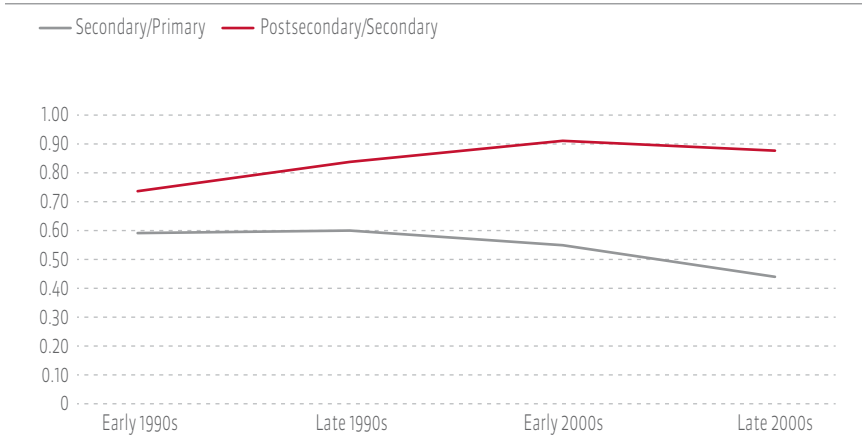
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<sup>1</sup> Among the key articles that document these facts and explain them by differentiating changes in the demand for and supply of labor are those of Sánchez Páramo and Schady (2003); Manacorda, Sánchez Páramo, and Schady (2010); and Behrman, Birdsall, and Szekely (2007). There are also numerous studies for individual countries—among them Attanasio et al (2005) for Colombia; Galiani and Sanguinetti (2003) for Argentina; and Pavcnik et al (2005) for Brazil.

Figure 1

**Wage premiums by educational group in Latin America and the Caribbean**

(Adult Workers)



Source: Author's calculations based on SEDLAC (2009).

market became polarized between occupations that require the complex skills typical of more-educated workers and those requiring nonroutine manual skills typical of less-educated workers. The end result has been fewer opportunities for middle-class workers (Levy and Murnane, 2003; Katz and Kearny, 2006; 2008).

Apart from changes in wages, the obstacles faced by young workers in the Latin American labor market are evident in other ways. About 15% of those who want to work cannot find jobs. This is a sharp increase from the early 1980s, when youth unemployment did not exceed 5%. Among those working, 54% do so informally, compared with 45% three decades ago. For young people with primary education, the figure is 70% (up from the 50% observed in the early 1980s). And among secondary-school graduates, the informally employed make up 50% of those working, compared with 30% in the early 1980s. Here, it is institutions and labor regulations that have decisive influence, translating changes in demand and supply in the labor market into changes in wages and employment conditions, including unemployment and informal work. But the extent to which today's labor problems stem from a disconnect between the skills demanded by employers and those available in the young labor force remains unknown.

In this context, there is a need to analyze the effectiveness of the educational system regarding prepare young students to succeed in a changing labor market, and to equip them with the skills required to perform well in their careers and in their lives. Although there is a wide range of possible interventions to alleviate these problems, this book seeks to understand the role

schools have (and should have) in this process. The next chapter discusses the situation of education in Latin America to determine whether the education system is responding effectively to the demand of the labor market in terms of competencies and skills that young people are expected to have.





# 3

## The Education System: Quantity without Quality

In the 1960s the economist Gary Becker coined the term human capital to describe certain assets that, despite being intangible, are nonetheless critically important to economic and social welfare. Becker explained that education, training, investment on health, and even punctuality and honesty are capital, since they contribute to higher earnings, better health, and good habits that pay off over a lifetime. In that sense, greater human capital—in terms of quantity and quality—, including one of its key components, education<sup>2</sup>, leads to higher quality of life for individuals—and society.

Specialized literature has shown that a positive relationship exists between education (measured in years of schooling) and economic development, and more recently, between educational quality (measured in terms of developed cognitive abilities<sup>3</sup>) and economic development. There is also evidence that the cognitive and socioemotional skills (personality traits<sup>4</sup>) affect education achievements, salaries and employment opportunities (Murnane, Willet, and Levy, 1995; Currie and Thomas, 1999; Heckman, Stixrud, and Urzúa, 2006; Cunha et al. 2006).

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<sup>2</sup> Becker (1964, 1993) suggests that education is the most important producer of human capital, knowledge and skills that enable a person to develop.

<sup>3</sup> Based on the Third International Math and Science Study (TIMSS), Hanushek and Kimko (2000) suggest that results in math and science have a significant, consistent, and stable impact on economic growth. Lee and Barro (2001), also using TIMSS data, distinguish between quantity (measured in years of schooling) and quality (measured in internationally comparable test results); they too suggest that although both quantity and quality are important for economic growth, quality has a higher impact. Likewise, Hanushek and Woessmann (2009) propose that the deficient economic performance of the region can be explained by the TIMSS and PISA evaluations, which show low levels of knowledge and cognitive skills in the areas of reading, math, and science.

<sup>4</sup> Often referred to as noncognitive skills.

To understand how education systems affect the job prospects and performance of Latin American youth (discussed in the previous chapter), this chapter analyzes both the quantity and quality of schooling offered in countries across the region. In the process the chapter poses several key questions: How is the region doing in terms of education? After a well documented increase in the access to the education system, did more years in school translate into more knowledge and more job-relevant skills?

Ninety-five percent of Latin American children of primary-school age are enrolled in school—very close to the 96% observed among high-income countries of the Organisation for Economic Co-operation and Development (OECD). In secondary school, 73% of the secondary-school age group are enrolled, still significantly lower than the 91% found in the OECD but up from 65% during the 1990s. In terms of years of schooling, people in the OECD countries complete an average of 11.9 years, whereas Argentines complete 10.5, urban Brazilians 9.2, Chileans 11, Peruvians 10.7, and Panamanians 9.9—a difference of 1 to 3 years of schooling across the countries compared<sup>5</sup>.

Considering the differences in the time spent at school, how much do Latin American children learn in comparison with those from advanced economies? The results of PISA 2009 (OECD, 2010a)—the international test that assesses existing core competencies to apply mathematics, language and science knowledge in daily life situations—are quite illustrative. Among Latin American adolescents aged 15 who were evaluated in PISA, almost 50% did not reach the minimum level in Reading, that is to say, more than twice the average number of students of the OECD in the same situation (less than 20%). In Mathematics, the results are even more worrisome. In Latin America, about 65% of young people did not reach the minimum level, which tripled the average of OECD students who are at the same level (figure 2). This means that the average Latin American adolescent does not have the minimum capabilities to solve basic problems in real life, at least in the nine countries from the region that participated in PISA 2009 (OECD, 2010a). This proportion is much lower in more advanced educational systems.

And this is the situation of young people who have stayed in school. More complicated still is the outlook for those who drop out before finishing secondary school. The completion rate for the first phase of secondary education (3 years in addition to 6 years of primary education) is a little more than 50 percent among those aged 15 to 19. The graduation rate (signifying completion of 12 years of education) is close to 40 percent among those aged 20 to 24. In other words, only 1 out of 2 young Latin Americans had finished the first cycle of secondary education by age 19 and only 2 out of 5 had managed to complete

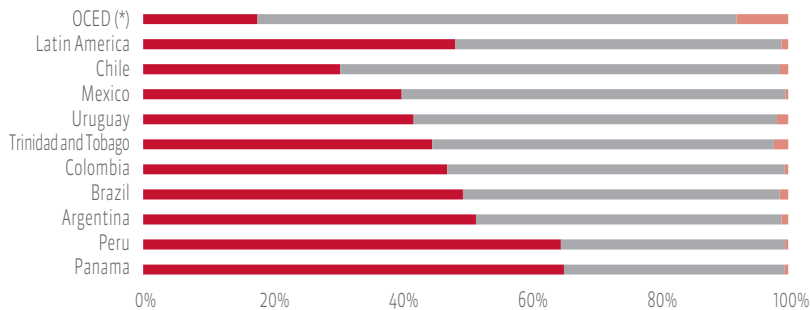
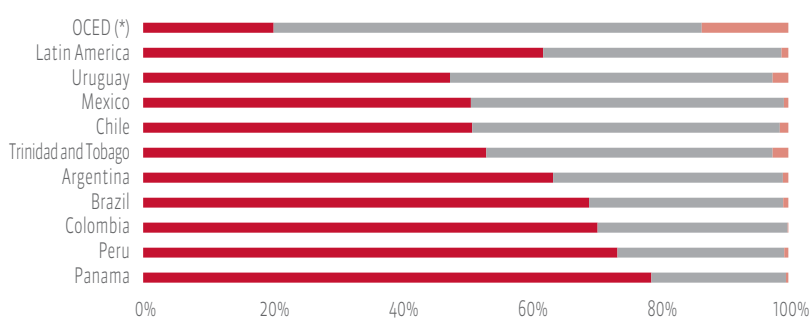
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<sup>5</sup> OECD data from OECD (2010c). Data for the Latin American countries are for individuals aged 15 to 24 and were obtained from the Sociómetro database (IDB, 2011).

Figure 2

**Distribution of PISA scores by levels of performance**

■ Low ■ Medium ■ High

**Panel A: Reading****Panel B: Math**

Source: OCDE (2010a)

Note: Low level of performance includes the percentage of students that achieved level 1 or lower according to PISA classification (in the case of Reading, it includes levels 1a and 1b); medium level includes students that achieved levels 2, 3 and 4; high level includes students that achieved levels 5 and 6.

The OECD average excludes Chile and Mexico.

high school before age 24 (IDB, 2009). So despite significant increases in access to education in the region, more than 50 million Latin American youths go no further than secondary school. It is their last point of contact with the educational system, their jumping-off point into the labor market. That is why the secondary-education system in the region has the enormous challenge of keeping young people in school and providing them with the skills that employers and society will later require of them.

It is clear that traditional ways to measure education, such as those described here, are insufficient to reflect the skills required to succeed in the labor market today. The main national assessment systems in the region aim at measuring cognitive abilities and academic achievement. There is no measurement

of non-cognitive or socio-emotional skills in the educational system in Latin America and the Caribbean, although such deficiency does not only occur in the region. For the time being, this type of evidence is available only at a pilot and testing phase, particularly in OECD countries<sup>6</sup>. Obviously, before measuring these non-cognitive skills, they will need to be developed. As seen in this chapter, Latin America lags well behind OECD countries in terms of quality of education provided to their children and adolescents regarding knowledge skills. But, these are not the only skills that matter for the school-to-work transition of young people. Socio-emotional skills also matter, as it will be discussed in detail in Chapter 6. Hence, making efforts aimed at identifying and defining strategies to develop, strengthen and complement these skills within the educational system, is of key importance.

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<sup>6</sup> A recent study (Pilot study on teaching and innovative learning carried out in Russia, Senegal, Finland and Indonesia in 2009 and 2010 by a consortium involving UNESCO, the International Society for Technology in Education, Microsoft, and OECD) suggests the enormous difficulty faced by teachers to ensure students acquire new skills that are considered necessary for everyday life and work. These skills include critical thinking (process information, drawing conclusions and making decisions), teamwork (collaborative work with peers) and leadership (ability to lead their peers and have the ability to communicate their ideas effectively). The results of this pilot test suggest that teachers are at very incipient stages when teaching these skills. Usually, teachers are unaware of them and they lack support to know how to develop and measure them in their students. The emphasis is still exclusively focused on the development of more traditional cognitive skills.





# 4

## **Looking for Clues: Where and When are Cognitive and Socioemotional Skills Developed?**

People have a comprehensive set of abilities (skills and talents) that differentiate them and affect their socio-economic performance during the course of their lives. This principle has been widely documented in the abundant literature on this topic in the fields of economics and psychology (Borghans et al., 2008). This chapter develops the conceptual framework to define these groups of skills and describe how and when they are developed to determine, later, the possibility and the better moment/age to affect them.

Even when there are many different dimensions to characterize an individual, specialized literature in general has grouped them into two broad categories: cognitive and non-cognitive or socio-emotional. Cognitive skills are understood to be those that have to do with cognition (correlated with intellectual coefficient) and knowledge (mathematics, language and other disciplines), which allow the domain of the academic knowledge. Socio-emotional skills are defined as those that belong to the area of behavior or arise from the personality traits, and are usually referred to as “soft” skills.

Research on this topic has shown that certain elements of the environment in which a person develops affect both cognitive and socioemotional skills, such as the family background and school characteristics. However, the degree of malleability of the different types of skills and the right time to modify them (window of opportunity) varies (Cunha et al., 2006). In addition, there is consensus that the differences in skills and the outcomes they generate appear at a very early age and that this gap can be reduced only partially through well-designed public policy interventions (Cunha et al., 2006; Behrman and Urzúa, 2011; and Schady, 2011). The sooner these interventions are carried out in the life of a child, the greater the chances of success to remedy

the disadvantages originated in the characteristics of a family or in an adverse context.

The main contribution of this branch of literature is that it extends the range of relevant skills to include the socioemotional skills, whose role has been underestimated by the economic literature. Today it is widely accepted that it is a “set” of multiple skills that contributes to achieve different working or schooling achievements (Maxwell, 2007). These findings have practical implications of crucial importance. In contrast to the cognitive development, in which the incidence of genetic components is greater and can be affected by the environment (including school) almost exclusively during the early childhood, the socioemotional skills are more responsive to the stimuli of the context and they can be developed until the adolescence (around 20 years of age). And although there are no mathematical formulas to precisely define the period of intervention in this area, it is true that the window of opportunity here is significantly broader and that high school can play a key role in their development. The fact that a group of proven relevant skills to today’s labor market can be acquired, reshaped and consolidated during secondary education is a finding of first importance.

It is not too late to do so and returns are high. That is why secondary education can be seen as a second great opportunity to promote additional competencies that will have a significant impact on the lives of these youth, especially among those who come from the most vulnerable families. Although the window of opportunity to influence the development of cognitive (intellectual) skills has been closed, it is still possible to shape other relevant skills, which can reduce the gaps for those who have experienced disadvantages in their environment. This does not mean that schools should cut back their efforts focused on teaching academic contents that have been traditionally their domain, and which learning occurs throughout the entire schooling cycle. What is being suggested here is that the scope of intervention of schools should be widened to include a group of skills that have been set aside in the classrooms and that are susceptible to be developed until youth. Most importantly, these skills are relevant for the youth to progress in their careers and their lives.

There were no rigorous studies analyzing these issues for Latin America, since the available information in the region did not allow a study of the role that cognitive and socio-emotional skills play in the transition from school to work. A critical step toward a better understanding in this field is to develop longitudinal information that includes measurements of skills prior to their entry into the labor market. This information would be a key component in the process of implementation and design of educational and labor policies to improve the experiences of individuals during this period. The efforts in Latin America must strive in this direction.



# 5

## **A Skills Factory? What the Educational System Provides**

To investigate whether the situation affecting Latin American young people with secondary education partly reflects a gap between the skills acquired in school and those required for good jobs in the region it was necessary, first, to marshal information on young people's skills (in addition to those measured in knowledge tests) and explore the relationship between those skills and educational and employment trajectories. It was also necessary to describe the skills required by Latin American employers, going well beyond the anecdotal evidence that inspired the authors' hunch that the situation in the region was comparable to that of advanced economies in terms of the so-called soft or socioemotional skills.

With this purpose in mind, two original surveys were designed: one to study young people's skills and trajectories, that is, the labor supply side; and another to determine the demand for labor in five economic sectors that employ a significant percentage of the group that is the focus of this book—young people with secondary education. The first survey—dubbed the Skills and Trajectories Survey (STS)—was conducted in Chile and Argentina, two countries with similar educational systems but also key differences that make the comparison valuable. In Chile, the survey was administered in 2008 to 4,497 individuals aged 25 to 30. In Argentina, the survey was administered in 2010 to 1,800 individuals aged 25 to 30. The second survey—the Demand for Skills Survey (DSS)—was conducted in early 2010 at 1,176 private firms in Argentina, Chile, and Brazil (in the latter case, only in the state of São Paulo).

What does the information reveal? In this chapter, the authors focus on the trajectories and skills of young Argentines and Chileans, asking two questions: First, is there a relationship between formal education and skills? In other words, do more educated individuals also have higher levels of cognitive and socioemotional skills? Second, what is the relationship between skills and

outcomes in labor market? Specifically, how are cognitive and socioemotional skills associated with work performance?

Identifying the relationship between education and skills clarifies the mechanisms behind the positive link between years of schooling and work performance. It is known that more-educated workers do better in the labor market (higher wages, higher employment rates, lower percentage of informal jobs). But what difference does education make in an individual's abilities to achieve results? What, if anything, does the educational system add that makes educated people more productive? Chapter 5 examines whether education is associated not only with greater knowledge but also with higher levels of other skills that contribute to improved performance in the labor market.

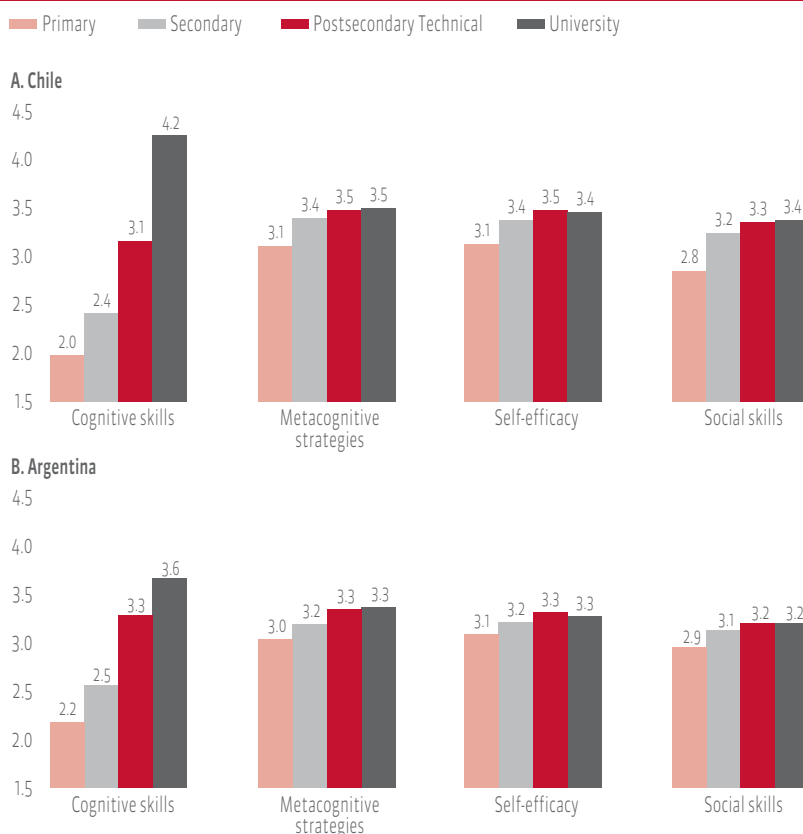
The CSS includes a battery of tests specially developed by a team of psychologists to measure four skills in Argentina and Chile. One is cognitive: intellectual ability, correlated with IQ. The other three are socioemotional: (i) social skills, or leadership ability and the ability to relate to others; (ii) metacognitive strategies, or the ability to organize and plan cognitive tasks; and (iii) self-efficacy, or the inclination to perceive oneself as a good student or an effective worker. Moreover, the surveys include a series of questions that allow the investigators to reconstruct the educational and employment trajectory of the respondent (see appendix A).

One of the first findings of the analysis is that the cognitive skill does not appear to be closely correlated with the three socioemotional skills. This means that a person's level of socioemotional skill does not indicate much about his or her intellectual capacity, and vice versa. By contrast, the correlation among the three socioemotional skills is higher, which is to be expected given their nature, the way in which they are affected by the environment and genetic factors, and the developmental period during which they can be modified. These findings confirm those found in the literature on the subject (Ardila, Pineda, and Rosselli, 2000; McCrae and Costa, 1994; Stankov, 2005) and imply that people with higher levels of socioemotional skills have advantages, because they probably also perform well on other noncognitive dimensions.

The analysis of the STS (2008 and 2010) indicates a positive association between the level of schooling and cognitive skills, metacognitive strategies, and social skills (figure 3). The similarity of the patterns observed in Chile and Argentina suggests that the results are robust. It is worth noting, however, that in the case of self-efficacy, the survey found that university students score lower than students who obtain a postsecondary technical or vocational qualification. This may be related to the effect of completing an educational level: those who complete an educational level have higher skills than those who do not, as suggested by the results presented in chapter 5. Since many students drop out of university, the average skill level of university students (those who finished and those who dropped out) is lower overall than the

Figure 3

### Average levels of cognitive and socioemotional skills by level of education reached (but not necessarily completed)



Source: Authors' calculations based on STS survey results (2008a e 2010b)

average recorded for the graduates of postsecondary vocational and technical schools.

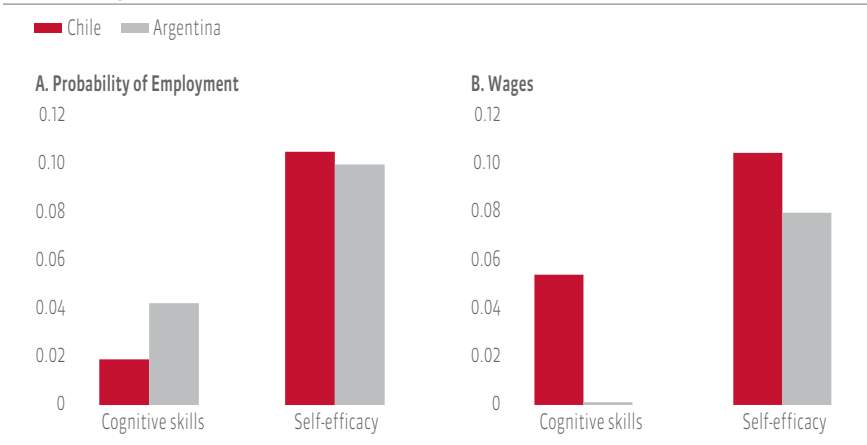
Although the overall patterns are similar in the two countries, there are also differences. In Chile levels of cognitive and socioemotional skill appear to increase more as the level of education rises. One possible interpretation is that each level of schooling in the Chilean system generates greater value-added (as measured by greater increases in the skills measured by the survey) when compared to the Argentine system. An alternative interpretation relies on possible institutional differences between the two countries, which could explain why the Argentine system produces graduates that are, on average, more homogeneous (in that they display smaller differences in the levels of skill acquired over the course of their education) than their Chilean counterparts.

But the data do not allow one to determine whether the association between education and skills stems from the effect of education or selection. In other words, it is not possible to distinguish whether the school actually instills skills in young people or whether it simply selects those who already possess the skills, ensuring that those with better skills advance farther in the educational system. Distinguishing between these effects requires longitudinal data and presents a challenge for future research.

Another noteworthy finding is that technical secondary school graduates exhibit higher levels of socioemotional skills. Whether by selection or education, technical secondary education is indeed associated with the skills that the labor market demands these days, at least more so than traditional secondary schools.

With regard to the skills associated with better labor-market outcomes—for example, rates of participation in the labor force, employment, and wages—the results again indicate that socioemotional skills play a more important role than cognitive skills (figure 4). In Chile and Argentina, the relationship between self-efficacy and both employment and wages is positive. The relationship between cognitive ability and employment is also positive for both countries, whereas the relationship between cognitive ability and wages is positive only for Chile. In both cases (wages and employment), the association with cognitive ability is significantly lower than the association with self-efficacy. In other words,

Figure 4  
**Association between selected skills and employment outcomes**  
(Workers aged 25 to 30)



Source: Authors' calculations based on STS survey results (2008a e 2010b).  
Note: The estimates were obtained with a Probit model of employment and log wages as dependent variables, respectively. Explanatory variables include age, gender, father's education, mother's education, family income, skills levels (without controlling for level of education of the individual). In both cases, individuals who were in school at the time of the survey were excluded from these regressions.

self-efficacy is more closely correlated with work outcomes than is cognitive ability. Young people who perceive themselves to be effective students or workers are more likely to be employed and earn higher wages than those who lack this positive self-perception.

The results of this exercise for the other skills and employment outcomes (such as labor force participation) again suggest a greater association with self-efficacy. People with higher levels of self-efficacy reported greater participation in the labor market. This does not necessarily imply that self-efficacy leads to improved work performance. It is no doubt also true that success in the labor market has a feedback effect on self-efficacy by improving workers' perception of their own abilities. Still, the association between socioemotional skills and work performance is a first indicator of this relationship, and the causal effect of such skills on labor outcomes requires further attention.

The results for Chile and Argentina also show the importance of understanding the role of the education system and how it contributes to a good performance of the workforce, and highlight the importance of having better information on the relationship between education, skills and the labor market for all countries in the region.







# 6

## Demand for Skills: Employers Speak

The transition from school to the labor market can be divided into two stages. During the first stage young people decide—subject to a series of restrictions—what kind of education they want to get considering the future of employment they want to achieve. In general, these decisions involve choosing which type of school to attend (traditional or technical), they determine how much effort to devote to studying, which materials to prioritize, if finishing high school or not, and whether to continue with higher or university studies or not. The second phase occurs when young people choose to leave the educational system to join the labor market and fill positions that will leave a mark on the future of their careers.

For those youth who do not continue toward postsecondary education, high schools represent the platform from which students look for and get their first jobs. A successful transition from school to work requires that what was learned in the classroom is relevant and useful for the employers that make up the labor demand. Unfortunately, little is known about how the school-to-work transitions in Latin American countries, what factors can be associated to a successful insertion into the labor market or what types of skills and knowledge are demanded by the companies.

To better understand how these trajectories start and evolve this chapter seeks to respond to the following questions from the standpoint of the companies in the region, that is to say, from the demand for labor:

- What are the jobs occupied by young graduates of secondary education moving from school to the labor market?
- What skills are they are expected to have by the time they join a company? Has the demand for skills changed in recent years?
- How easy or difficult is it for the companies in the region to find workers with the skills required for a productive performance?

- What are the strategies followed by the firms to deal with a possible dissociation between the skills they need and those brought by young high school graduates?

Chapter 6 explores employers' demand for skills using data from the DSS. Here an attempt has been made to identify the skills sought by nearly 1,200 surveyed firms from Argentina, Chile, and Brazil when hiring young people fresh out of high school. The DSS includes information to characterize the demand for such workers (what kinds of jobs exist for this group, and what career paths and growth opportunities are associated with these occupations). The survey also asks about the relative value that employers assign to the following broad categories of skills: (i) skills specific to a given sector; (ii) cognitive, knowledge-based skills (language and communication, reading, writing, problem-solving, critical thinking); and (iii) socioemotional skills (attitude in the workplace, commitment, and accountability; good customer relations; and ability to work in a team)<sup>7</sup>. Finally, the DSS asks about the difficulties employers face in finding young workers with the skills they require.

The DSS shows that good opportunities exist in the region for young secondary-school graduates—in other words, there are jobs available that offer decent wages and opportunities for advancement within the company. Entry wages—as reported by employers—for young people who have completed secondary school are double the minimum wage in the three countries in the sample. Also, the wages reported as average and maximum in these companies suggest the possibility of growth for young workers. But competition to get these jobs and keep them is intense. The wage distribution is relatively narrow for entry-level positions but wider at higher levels of experience. In other words, in the sectors that employ a large percentage of young high-school graduates one finds promising career paths as well as others that tend to stagnate.

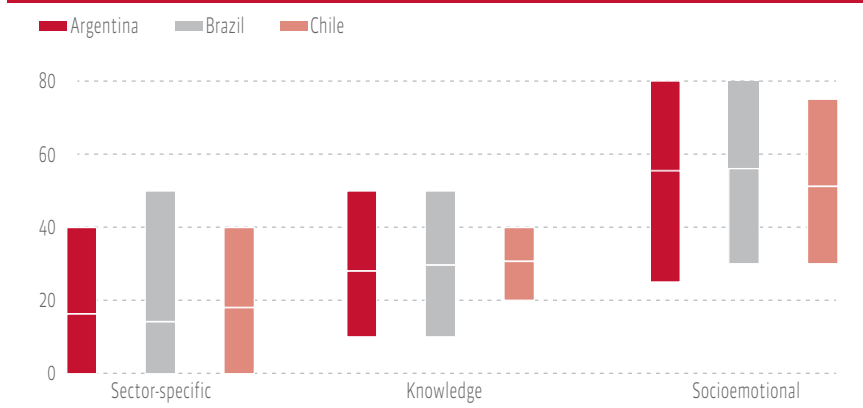
When asked about the value of different types of skills, firms report valuing socioemotional skills more than general or industry-specific knowledge. The score assigned to socioemotional skills is almost twice that assigned to knowledge and about four times that given to industry-specific skills. Socioemotional skills consistently receive the highest valuation in the three countries included in the survey (figure 5). The average value assigned to each skill group is remarkably similar in all three countries; although they show different variances (responses are somewhat more homogeneous in Chile, especially regarding knowledge-related skills).

Chapter 6 offers a similar analysis of skill valuation, disaggregating the data in various ways—for example, by sector, by firms that pay high wages vs.

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<sup>7</sup> Details on the methodology and content of the DSS are presented in appendix B.

Figure 5

**Valuation of skills by employers in Argentina, Brazil, and Chile**

*Fuente:* Authors' calculations based on SDS survey results (2010).

low wages, by local firms vs. international firms, and so on. In all cases, the socioemotional skills are the most valued, according to employers. But the same employers say they have trouble finding these skills in young people graduating from secondary school. Only 12 percent of respondents reported having no difficulty finding the skills their firms need when hiring new workers. There is also evidence that Chilean businesses seem to have less difficulty in this area than their Argentine and Brazilian counterparts. But in all three countries, socioemotional skills are, according to those surveyed, the most difficult to find in the young labor force (figure 6).

Finally, the survey results indicate that the gap between employers' requirements and the skills offered by young people graduating from high school is costly, both to graduates (in terms of unemployment and lost opportunities) and to employers, which must invest more in recruitment and training to compensate for these deficiencies.

The analysis of skills required by firms is complemented by three case studies, summarized in chapter 6 and presented in their entirety in appendix C, that illustrate several of the results of the quantitative analysis of the survey, reflecting in a vivid way the main messages of this book.

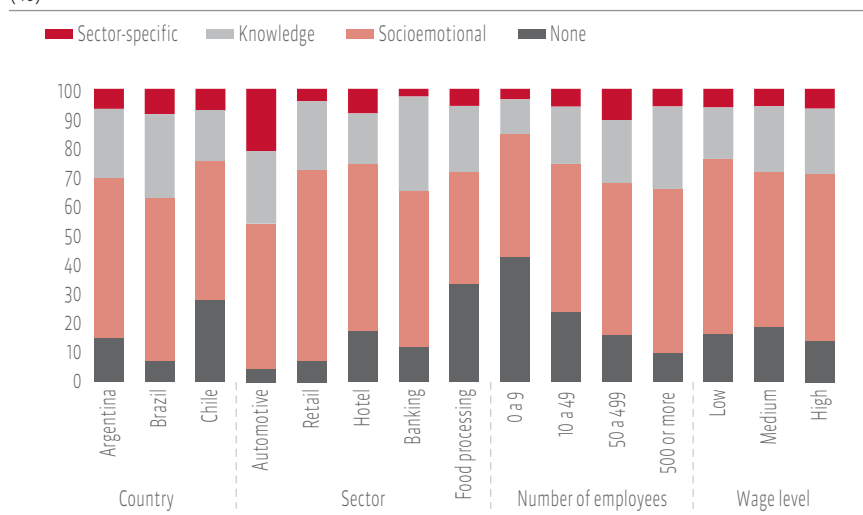
The case of a luxury hotel in Chile highlights the deficiencies observed both by the employee interviewed for the study and by her employers in the ability of secondary schools to instill the skills required by young people entering the workforce. Because of those deficiencies the hotel's management is more interested in the attitudes of those aspiring to work there than in their knowledge.

The case of an automobile firm in Argentina illustrates the importance of having behavioral skills to function successfully in the workplace. "The most

Figure 6

**Employers' reports of difficulty in obtaining different types of skill**

(%)



Fuente: Authors' calculations based on SDS survey results (2010)

important skill for this job is responsibility,” said a young man who participated in the study.

The last case, conducted at one of Brazil's largest banks, confirms the role of higher education in compensating for the deficiencies of secondary schools. One respondent from the bank stated, “In Brazil, school is a place that gives grades to get a diploma that is only useful for entering university.”

From the results presented in this chapter indicate that a reduction in the gap between skills' demand and supply can translate into large social welfare gains. The next question is, then, which are the public policies that can help reduce this gap effectively. Chapter 7 outlines some ideas on this particular subject.



# 7

## Rethinking Schools for the Contemporary Labor Market

Students' learning—in particular, the skills and competencies that they will use in their productive lives—should be the central concern of educational reforms in Latin America and the Caribbean. This seems to be an obvious remark. However, many of the interventions, policies and programs undertaken in the region in education have not prioritized this objective. Evidence of this is that there is not yet an effective system to measure the progress of students in these relevant skills and that those available are limited to the measure of academic skills in which schools have traditionally concentrated, leaving aside other competencies which are proving to be increasingly important in the labor market, such as those related to behavior. Skills—both knowledge and socioemotional—are fundamental for the continuous development of children and young people in the education system and later in the labor market.

The accomplishments in education in the region over the past thirty years present two widely discussed facets (Chapter 3). On the one hand, Latin America has shown positive results in terms of access. On the other hand, the region is challenged by negative indicators of the quality of education, as measured by academic knowledge. Today, there are more children and young people entering the education system, but many do not graduate and few really learn. The results from national tests suggest that knowledge which is relevant for future development of the youth is not being acquired in schools, while international comparative evidence points out that the skills which are valued in the global labor market are not being formed either.

Using new and original data, this book intends to find out if there is disconnect between the supply and the demand for skills – in other words, between skills developed in school and skills demanded by the labor market. The results show that such disconnect exists and not only because of the poor academic training that students receive, but it also because of a lack of socio-emotional

skills that are relevant for work and which according to employers are difficult to find in the young labor force.

The research and analysis presented in previous chapters highlight three primary issues behind the disconnect of skills in Latin America, which in turn reveal key aspects that should be considered in the design of policies and programs aimed at closing the gap between the education system and the labor market:

- The disconnect between the supply and demand of skills confirms that schools are largely isolated from their environment, especially from the productive system.
- The main actors involved (students, parents, teachers, schools' authorities and policy makers) need more information about the type of skills and competencies demanded by the labor market. Neither the education system is generating valuable information on the skills that are being formed in schools, because assessment mechanisms focus exclusively on the measurement of knowledge of academic contents.
- The deficient teaching of relevant cognitive and socioemotional skills occurs, in part, because of an teachers are poorly trained and equipped to teach these skills, and there are no incentives mechanisms that reward it.

The objective behind the research conducted for this book was not only to increase understanding of the skills gap in the region, but also to identify ways to improve the educational system so that it smoothes the transition of young people into their first job.

What should be done about the mismatch between students' skills and employers' requirements? There is more than one answer, and none is simple. The first step is to recognize the need to widen the scope of schools' interventions. Preparing young people for the twenty-first century requires greater awareness on the part of students, educators, and policy makers of the demands that students will face in their working lives. Their future employers have changed their performance-related requirements and expectations. Schools in Latin America will have to reinvent themselves to keep up with those changes and help young people to compete with their peers—in Latin American and around the world.

Building a solid educational system that is more integrated to its environment requires at least two key elements: quality and relevance. Schools should prioritize those factors that contribute to the effective development of the skills that students need to progress in their careers and in their lives: trained teachers, assessment and information systems which are aligned with a broader range of skills, including socioemotional skills, closer links between the schools and their environment—especially to the productive sector, and incentive schemes which are consistent with goals established.

The world has good examples of education systems that are successful in achieving academic excellence, such as China, Korea and Finland, to name a few. The region can learn a great deal from these experiences. However, there are still no comparable experiences when it comes to the development of socioemotional skills. In this case, only pilot experiments, narrowed projects and specific surveys have been developed to date. Clearly these are valuable experiences that should be considered starting points, but they do not yet provide conclusive evidence or set trends.

More research in this area is needed; especially studies that can identify the causal relationship between cognitive and socioemotional skills and educational and labor market outcomes. There is also a need to design and implement rigorous impact evaluations that are able to determine which policies, programs and teaching practices are more effective to foster students' academic competencies and socioemotional skills. The change must begin in the classroom and extend to all the actors of the education system.

The Inter-American Development Bank provides technical support to advance the development of the region. It is appropriate that the bank should contribute to the process of transforming schools to respond to current requirements. The new information presented in this book is an initial contribution to facilitate an urgent and necessary debate. Change must occur soon if the region's young people are to succeed in the workplace, in society, and in a competitive and globalized world.







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