



## SKILLS TRAINING PROGRAM

August 2017

This paper was primarily written by Marianne Bertrand and Bruno Crépon, with assistance from Alejandro Campos, Lisa Corsetto, Johanna FajardoGonzalez, Claudia Macias, Anna Schickele, Nour Shammout.

Suggested Citation: J-PAL. 2017. "J-PAL Skills for Youth Program Review Paper." Cambridge, MA: Abdul Latif Jameel Poverty Action Lab.

# Contents

|   |    |
|---|----|
| Executive Summary .....   | 3  |
| 1 Background: Youth Unemployment in Latin America .....                 | 6  |
| 1.1 Components of the Problem.....                                      | 7  |
| 1.1.1 Unemployment .....  | 8  |
| 1.1.2 Inactivity and Unpaid Work.....                                   | 9  |
| 1.1.3 Poor-Quality Employment.....                                      | 11 |
| 1.2 Skills Mismatch.....  | 13 |
| 1.3 Main Actors and Policies in LAC .....                               | 14 |
| 1.3.1 Chile .....   | 14 |
| 1.3.2 Colombia .....  | 14 |
| 1.3.3 Dominican Republic .....  | 15 |
| 1.3.4 El Salvador.....  | 15 |
| 1.3.5 Mexico .....  | 16 |
| 2 Types of Training .....   | 17 |
| 2.1 Cognitive Skills Training.....                                      | 18 |
| 2.2 On-the-job Training.....  | 21 |
| 2.2.1 Apprenticeships and Internships .....                             | 21 |
| 2.2.2 Other Employment Programs Involving an On-the-Job Component ..... | 24 |
| 2.3 Non-Cognitive Skills Training.....                                  | 25 |
| 3 Program Design and Implementation Features.....                       | 30 |
| 3.1 Targeting and Demand for Training.....                              | 30 |
| 3.2 Retention .....   | 32 |
| 3.3 Quality .....   | 33 |
| 3.4 Private Sector.....   | 35 |
| 4 Conclusion.....   | 37 |
| 5 References .....  | 39 |
| Appendix: Description of Contextualization Exercise .....               | 43 |
| Chile.....  | 43 |
| Colombia.....   | 44 |
| Dominican Republic .....  | 45 |
| El Salvador.....  | 47 |
| Mexico .....  | 48 |

# Skills Training Programs

## Executive Summary

About one-fifth of the world's population is between 15 and 24 years of age, and the economic, social, and political consequences of this "youth bulge" will be experienced for decades to come. Adolescence is a time when critical decisions must be made—for example, about marriage, schooling, careers, fertility—that can dramatically impact the future trajectory of lives. It is also a period of habit formation with potential longer-term consequences for the individual and for the society. For example, decisions about smoking, drug use, eating habits, and sexual activity will have ramifications for the individual while the solidification of cultural and gender norms will influence the rest of society. While more young adults complete primary education and survive childhood diseases than ever before, they must be equipped with advanced skills beyond literacy to succeed in the contemporary economy. Investing in the health and future human capital of youth has the potential to positively affect poverty reduction well into the future through better skilled, healthier, and more active labor market participants; reduced fertility; and lowered disease burdens.

In Latin America, a large proportion of the region's population is young (between 15 and 29), creating a demographic dividend which has the potential to create a window of opportunity for dramatic increases in productivity, savings, and economic growth (OECD, 2016). However, Latin American countries have generally not been able to create the conditions necessary for youth to fully develop their capacities, and thus to enter or remain in the labor market. Disparities in access to education, jobs, and health care limit the opportunities available to many youth, and discrimination based on race, gender, or ethnicity further marginalizes and excludes youth from economic, social, and political processes (OECD, 2016). In 2014, around 64% of the youth population (ages 15-29) in the region was either poor or vulnerable, meaning they had daily per capita income lower than or equal to US\$10 (OECD, 2016).

While governments and NGOs are responding to these challenges with an expanding set of youth-focused interventions and the inclusion of youth-friendly features in standard programs, there is surprisingly little rigorous evidence to guide policymakers. Nor is there sufficient knowledge on how to design programs that address the different barriers and opportunities facing young women and men transitioning to the labor market. The absence of evidence on relative cost-effectiveness undermines the potential impact of policies and programs on the lives of youth, making it difficult to choose the policy alternative that will impact the greatest number of youth at the lowest cost.

One of the most popular explanations for youth unemployment is skill mismatch: there are skills needed and valued in the labor market, but these are different from the skills that youth have. Providing young people with the right skills through training is seen as a major policy priority. Firms in Latin America and throughout the world often report not being able to find employees with the

right skills and attitudes. At the same time, low-skilled youth often work in low-quality and low-paid jobs (OECD, 2015). Equipping young people with the right employability skills is therefore seen as a major policy priority.

**Overall, the main conclusion arising from the literature is that training has had mixed results.** Reviews in Card, Kluve, and Weber (2010) and Betcherman, Olivas, and Dar (2004) show that training has little effect, though some studies in Germany and Colombia find positive results in the long run (Fitzenberger, Osikominu, and Völter 2007; Lechner, Miquel, and Wunsch 2004). We do not know the reasons for this general lack of clear results, partly due to the fact that although there is great heterogeneity among training programs, only the effects of broad categories have been evaluated. Nevertheless, there remains a feeling that training must be a key component of youth labor market integration, given the large gap between the very low skill level of young people and the needs of firms, especially in developing countries.

**On the other hand, programs that combine classroom and on-the-job training have shown some qualified success in the short and long term.** The main finding from the evidence on these multi-component programs show that, first when cognitive skills training programs are combined with apprenticeships or internships yield positive employment effects. However, the short-term impacts are mixed and, only a few programs show sustained and positive long-term effects. Future research should examine whether the positive effects of these multi-component training programs were due to the vocational training, the internship, or the combination of the two. Training may improve the productivity of young people, but internships may reveal useful information about the job candidate to the employer and it may contribute to developing the candidate's non-cognitive skills in ways that classroom training does not.

**Some encouraging results have been obtained from randomized evaluations of programs that combine cognitive with non-cognitive skills training.** Among studies that were examined in this review, it was found that offering non-cognitive skills training, along with technical skills training, improved educational attachment and graduation rates, particularly for the most disadvantaged groups and that these training programs had positive effects on labor market outcomes. However, whether the positive impacts will persist is still an open question.

**One important question for research relates to targeting and how youth choose or are assigned to training programs.** There is room to test different ways to help youth and training centers make these choices, including providing youth with information about skills needed in different sectors and allowing them to upgrade their skills on their own, providing stronger mentorship and guidance, and providing them with vouchers to finance a training of their choice. In addition, training programs may succeed depending on how well they allow for different behavioral responses from trainees. Research has identified that different traits, such as prior education, income levels, competitive behavior, and preference for risk in trainees can have very different implications for likelihood to enroll, complete, and benefit from skills training programs. Another important

question relates to how to foster demand for training among young people and, once enrolled, how to encourage them to complete training.

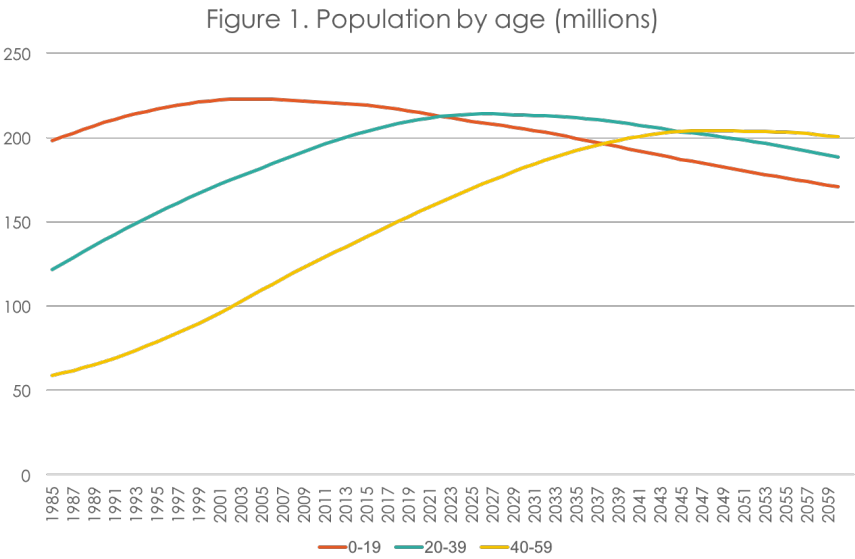
**We need a better understanding of what factors contribute to high-quality training and how it can be promoted.** Higher-quality training is more likely to impart the intended skills and generate positive labor-market outcomes. The quality of training varies considerably and there is often a tradeoff between offering high-quality training to a few people and offering cheap training to a larger set of people. A relevant question relates to investigating ways to incentivize qualified trainers to provide high-quality training.

**Another important dimension of quality is that of signaling skills to employers.** Large variation in the quality of skills training programs might make employers hesitant to hire graduates from various training programs. This is particularly relevant for youth who might lack other means to signal their quality as a candidate, such as references from previous jobs. As such, more research is needed to examine ways to signal the quality of the skills a trainee acquired through the training course and how that may influence employment outcomes.

**Evidence from various studies suggests that programs are more successful when the private sector is involved in developing the curriculum or training methods or in providing on-the-job training via internships or apprenticeships.** In order to provide trainees with skills relevant to the labor market, what is the best way to engage private sector players in designing training programs and curriculums used?

# 1 Background: Youth Unemployment in Latin America

Youth in Latin America are at a crucial moment. A large proportion of the region’s population is young (between 15 and 29), creating a demographic dividend: the working-age population is greater than the dependent population (see Figure 1). This demographic dividend creates a window of opportunity for dramatic increases in productivity, savings, and economic growth (OECD, 2016). However, this demographic characteristic is expected to change over time as the population ages and families choose to have fewer children, bringing new economic challenges.



OECD, 2016

Despite the demographic dividend, Latin American countries have generally not been able to create the conditions necessary for youth to fully develop their capacities, and thus to enter or remain in the labor market. Disparities in access to education, jobs, and health care limit the opportunities available to many youth, and discrimination based on race, gender, or ethnicity further marginalizes and excludes youth from economic, social, and political processes (OECD, 2016). In 2014, around 64% of the youth population (ages 15-29) in the region was either poor or vulnerable, meaning they had daily per capita income lower than or equal to US\$10 (OECD, 2016).

According to the OECD (2016), labor markets in Latin America are trapped in a “vicious cycle” in which high turnover disincentivizes education and training, resulting in low productivity. Combined with high costs of formalization for firms, this contributes to very high rates of informality in the region (47%, according to ILO, 2015). Due to high turnovers and high levels of informality, the majority of workers cannot support themselves during an unemployment spell while they look for a job that is appropriate for their skills and abilities. Therefore, job seekers are likely to take jobs that are poor matches, leading to higher turnover and closing the cycle (Alaimo et al., 2016).

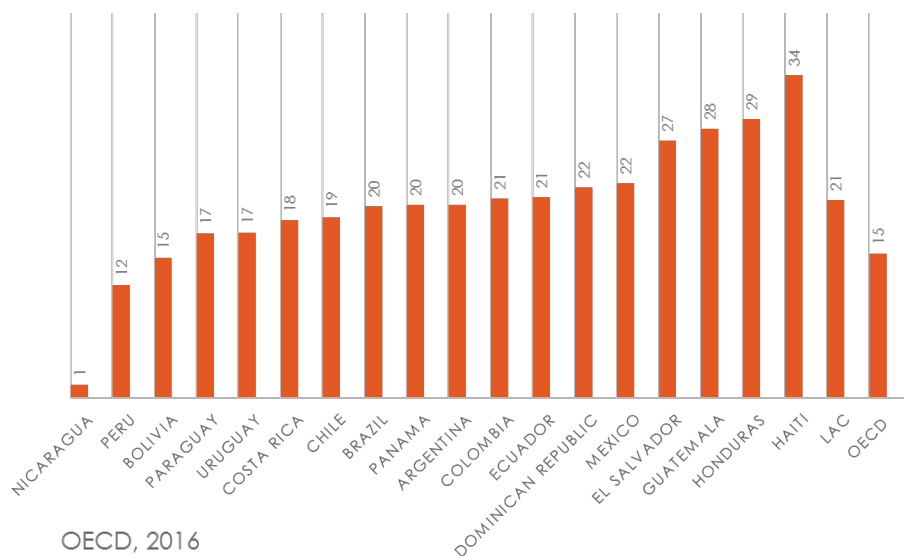
This cycle suggests that one major reason many youth are out of work or hold poor-quality jobs is that they do not have the relevant skills to qualify for high-quality positions. More than one third of Latin American firms believe that a key factor constraining the region's growth is the lack of adequate skills in the labor force (Manpower Group, 2015). As is the case in many middle-income countries, while the number of youth pursuing training or higher education in Latin America has risen since 2004, the proportion of young people who are not in education, employment, or training (NEET) is also high (21% in 2014). This fact suggests a disconnect between the skills youth acquire and the skills employers need. For those who participate in training programs, the training they receive may be inadequate or irrelevant for open jobs, meaning they cannot find work after completing training. However, many youth may not even begin training programs because they lack information about what job opportunities exist, what skills are required, and how best to prepare themselves.

## 1.1 Components of the Problem

Many government policymakers, private-sector firms, academics, and average citizens agree that there is a youth labor problem in Latin America. This is a multi-dimensional issue, encompassing unemployment, inactivity and unpaid work, and poor-quality employment.

In 2014, 14% of youth in Latin America were unemployed (ILO, 2015). The youth unemployment rate in the region is, on average, triple that of adults. However, unemployment rates provide an incomplete picture since they only consider the labor force that is available for and seeking employment. There is a proportion of the young population, sometimes called the inactive population, which is without work but is not available for or seeking employment. This population can include women who are involved in unpaid domestic tasks such as caring for children, individuals who have given up on searching for work, and students continuing their education. Some studies refer to the portion of youth who are not in education, employment or training (NEET), a rate that includes unemployed and inactive youth while excluding those who are economically inactive because they are pursuing education or training (see Figure 2). In Latin America, 21% of the young population (around 30 million individuals) was NEET in 2014, with the highest rates in Haiti, Honduras, Guatemala, El Salvador, Mexico, and the Dominican Republic. Moreover, even when youth find employment, it may be in informal or poor-quality jobs. The remainder of this section provides additional details on these three key components of the labor problem.

Figure 2. NEET Rate by country, 2014

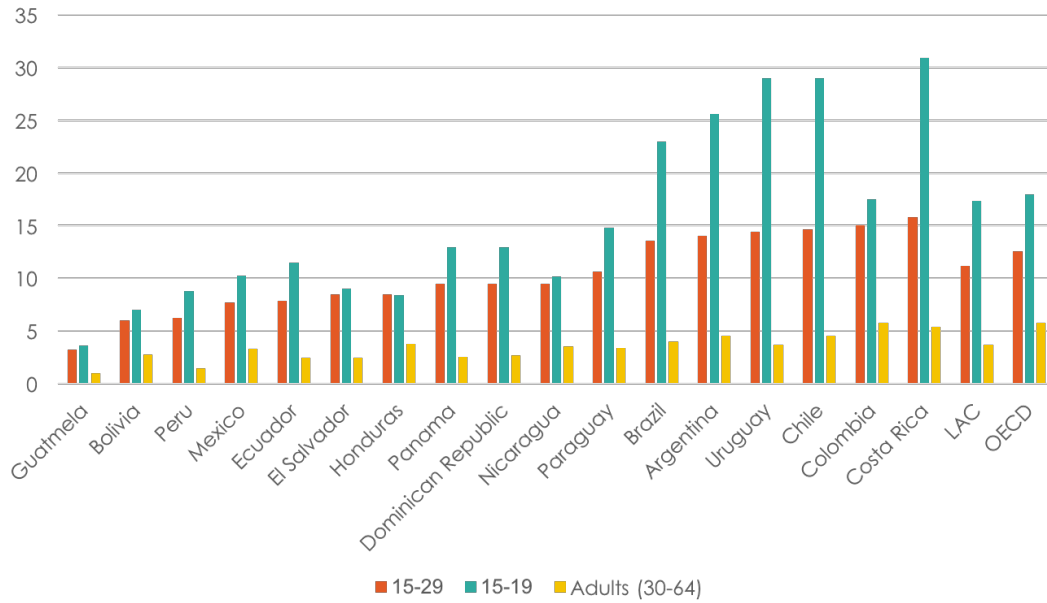


### 1.1.1 Unemployment

Around the world, youth tend to have higher unemployment rates than the general adult population. As Figure 3 shows, in Latin America, the unemployment rate among youth (ages 15-29) is, on average, three times higher than the adult rate (ages 30-64). The lowest youth unemployment rates are registered in the poorest countries, such as Bolivia, Guatemala, and Honduras; in less urbanized areas; and among youth with low education levels, reflecting the need for disadvantaged groups to take any job available. In contrast, higher-income countries, such as Costa Rica, Colombia, and Chile, present the highest unemployment rates. Therefore, an analysis of the situation of the youth in the region must distinguish between unemployment, a more pressing issue in higher-income countries, and informality, poor-quality jobs, and inactivity, which are more pressing in the poorest countries in the region.



Figure 3. Unemployment rate for young and adult populations, 2014



OECD, 2016

### 1.1.2 Inactivity and Unpaid Work

Inactivity differs from unemployment in that inactive individuals are not available for or seeking employment. There are many reasons why young people may be economically inactive. The most common reason is that they are investing in their own skills development (through education or training), which could open additional opportunities for employment or professional growth in the future.

A significant number of youth, especially among young women, spend their time on unpaid, domestic work, such as caring for children (see Figure 4). In fact, young women ages 20-29 with low levels of education are most likely to be NEET, and the barriers to entering the labor force that they face may be different from those facing young men. Many inactive young men may have lost their motivation to pursue education or employment, or in some cases, they may be involved in criminal activity.

Figure 4. Characteristics of NEET youth, 2011

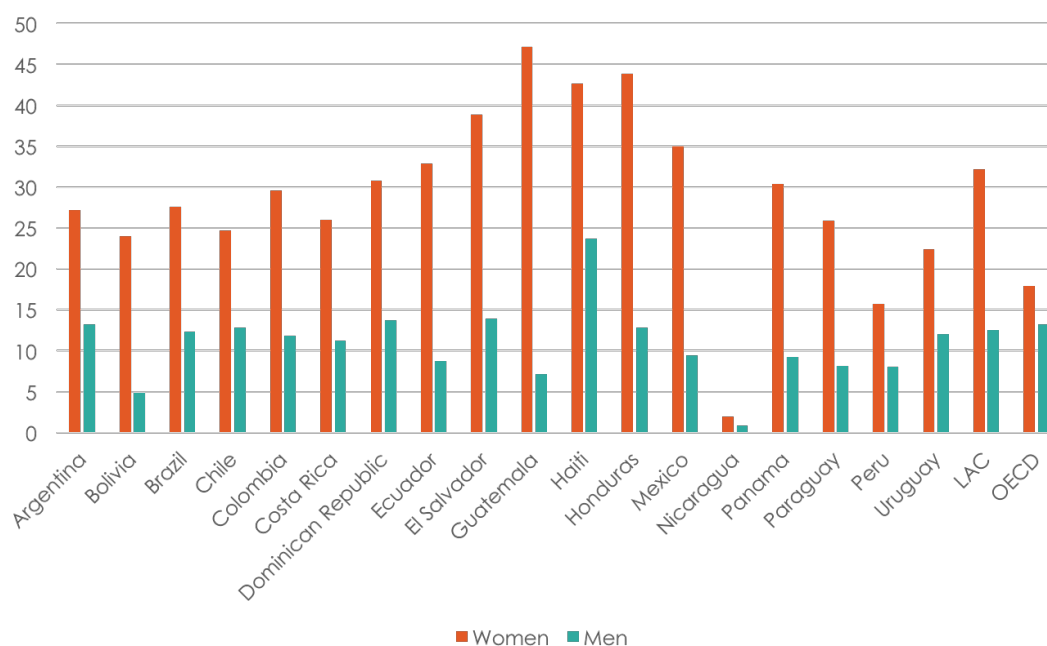


### 1.1.2.1 Domestic Work

In Latin America, young women have much lower labor force participation rates than young men, largely due to the responsibilities they may have at home. For example, in El Salvador, Guatemala, Honduras, and Nicaragua, the labor force participation rate for young men was 30 percentage points higher than the rate for young women in 2011 (ILO, 2013). Moreover, women form 76% of NEET youth in Latin America. Guatemala and Honduras had the highest NEET rates for women, at 47% and 44% respectively (compared to 7% and 12.8% for men) in 2014 (OECD, 2016). The vast majority of these women were doing unpaid domestic or childcare work: 70% of the NEET women in Latin America and 94%, 90%, and 87% in Guatemala, Honduras, and Mexico, respectively. In comparison, only 11% of NEET men do domestic or childcare work.

While domestic activities contribute to families' well-being and the economy more generally, young women who leave or do not enter the labor force may face difficulties reintegrating into the formal labor market or receiving formal education. In fact, compared to NEET men, women are much more likely to still be classified as NEET after one year, indicating that their decision not to enter the labor force is often long-lasting (OECD, 2016).

Figure 5. NEET rate by gender, 2014



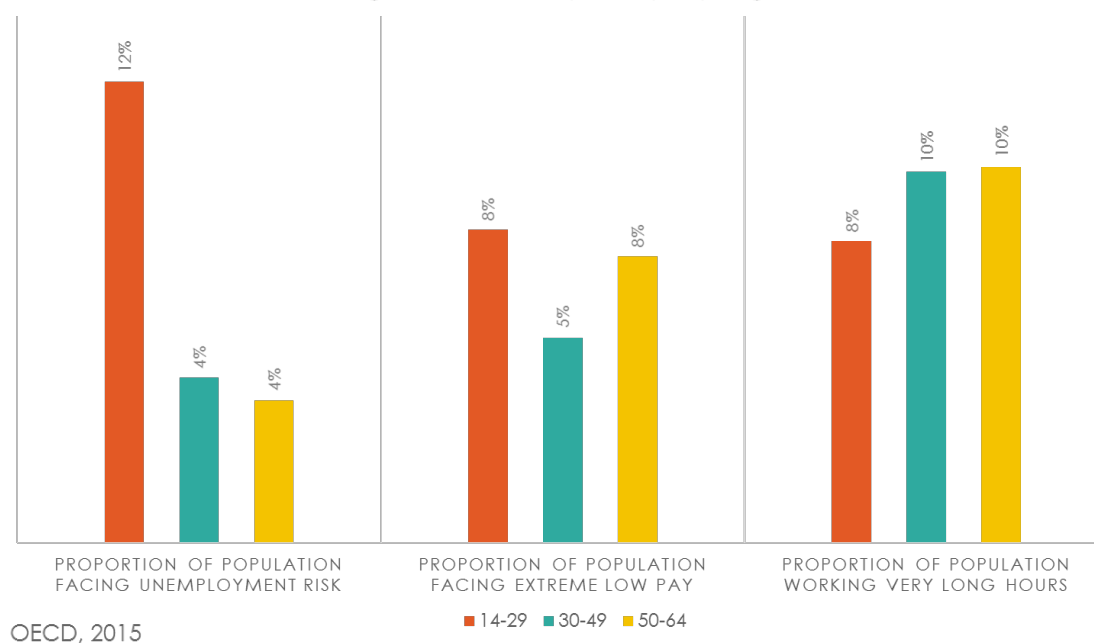
OECD, 2016

### 1.1.3 Poor-Quality Employment

Youth in Latin America who are employed often face the problem of poor-quality jobs and informality. Low-quality jobs may be characterized by poor salaries, long working days, little or no access to social protection programs, physically demanding tasks, and, in some cases, temporary or nonexistent contracts. Even though low-quality jobs are sometimes seen as stepping-stones to better jobs, youth often remain trapped in these types of jobs or abandon the labor market (OECD, 2016).

The OECD considers three dimensions to job quality: (1) earnings quality, which captures the extent to which earnings contribute to workers' well-being in terms of average earnings and their distribution across the workforce (a measure of inequality); (2) labor market security, which is defined by the risks of unemployment and extremely low salaries; and (3) working environment quality, which captures non-economic aspects of jobs including the nature and content of the work performed, working hours, and workplace relationships. An analysis of six Latin American countries (Argentina, Brazil, Chile, Colombia, Costa Rica and Mexico) showed that the region has a significantly lower job quality than the OECD average. Moreover, women, youth, and low-income populations are most likely to hold low-quality jobs. For example, whereas around 4% of the employed population between ages 30 and 49 experiences unemployment risk, for youth between ages 15 and 29, the percentage rises to 12% (see Figure 6). Poor job quality often contributes to high turnover among young workers, which in turn makes employers reluctant to hire youth for positions with better pay, working conditions, and job security.

Figure 6. Job quality by age



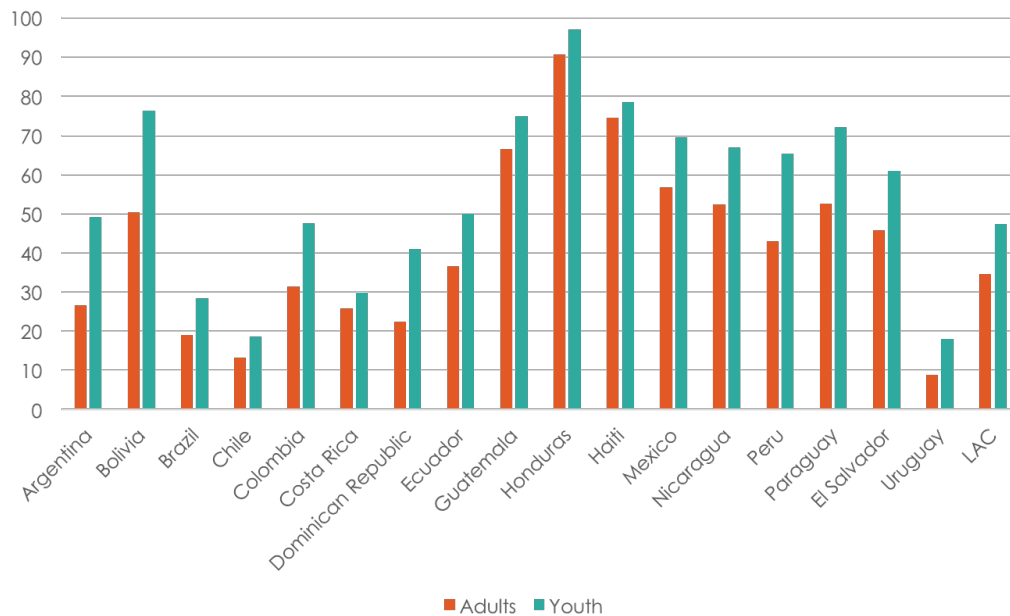
### 1.1.3.1 Informality

Informality can be thought of as a particular case of poor-quality jobs. Informal jobs are defined as jobs that do not meet labor and tax regulations. Therefore, informal employees do not benefit from social security protections linked to formal employment (SEDLAC, 2016). In general, informal jobs also offer lower pay, greater labor market insecurity, and lower-quality working environments. Informal workers usually earn two-thirds the earnings of formal workers (OECD, 2016).

Just as with unemployment and inactivity, there is a higher incidence of informality among youth than among adults. In 2014, it was estimated that, in Latin America, around 47% of youth worked in informal jobs, compared with 35% of adults (OECD, 2016). As Figure 7 shows, the countries with the highest informality rates for youth were Honduras (97%), Haiti (78%) and Bolivia (76%). Higher-income countries, such as Uruguay (18%) and Chile (19%), tend to have much lower rates of informality.

An analysis conducted for Argentina, Brazil, Mexico, and Peru shows that a substantial part of informal workers (15-29%) in these countries transitions to formal employment every year, which suggests that some workers may use an informal job as an initial step to formality. However, some populations transition from informality to unemployment or inactivity. This is particularly common among young women, who may prefer informal positions because they can allow for greater flexibility to also perform domestic responsibilities (OECD, 2016). Furthermore, in highly violent contexts such as El Salvador, youth may be forced to move from formal jobs to informal ones, as it can be too dangerous to travel to areas where formal jobs are available.

Figure 7. Informality rate by age, 2014



OECD, 2016

## 1.2 Skills Mismatch

A skills mismatch may be one of the causes of the multi-dimensional labor problem in Latin America. According to surveys of firms throughout the region, there is a significant gap between the skills youth possess and those firms seek in potential employees. These include both technical skills, such as ability to speak and write with correct grammar, do arithmetic, and other skills specific to the occupation (e.g. welding or computer programming); and soft skills, such as leadership, conflict resolution, and the ability to work in teams. Around 50% of formal enterprises in the region report having difficulties in finding job candidates with adequate training, compared to 15% of businesses in the OECD (Manpower Group, 2015). According to the same survey, employers cited low numbers of applicants, lack of technical competencies, lack of experience, and lack of soft skills as reasons contributing to the difficulty of filling open positions (Manpower Group, 2015).

One explanation for the lack of skills is the high number of youth who do not receive adequate formal education. In 2014, 31% of the young population (around 43 million individuals) in Latin America had not completed secondary school. Furthermore, only 30% of youth between 25 and 29 have been to university or to a technical or professional school (OECD, 2016). However, completing secondary or professional studies is not necessarily sufficient to guarantee their incorporation into the labor market since acquiring the necessary skills depends on the quality of the education systems. Another possibility is that the formal education system does not help students develop the hard or soft skills needed for employment. Some studies have shown that Latin American youth perform worse in

reading, writing, and numerical and technological skill than youth in OECD countries (OECD, 2016).

### 1.3 Main Actors and Policies in LAC

This review looks closely at the main actors and policies in five countries of Latin America and the Caribbean: Chile, Colombia, the Dominican Republic, El Salvador, and Mexico. Although youth unemployment, inactivity, and poor-quality employment are challenges for all of these countries, they showcase the diversity in labor markets, public and private training programs, and overall economic development that exists in the region. In order to collect feedback on the key challenges and potential solutions in each of these countries, we hosted a series of roundtable discussions with policymakers. Insights from these discussions have been incorporated throughout the paper (see the appendix for more details on the individual events).

#### 1.3.1 Chile

Chile's unemployment rate has risen since 2014 due to an economic downturn, and youth unemployment is around 14%. However, informal work is much less prevalent compared to other Latin American countries, at 13% overall and 19% for youth (compared to an average of 52% for youth in the region). Chile also has much higher levels of educational achievement: 82% of youth finished secondary school, and 44% of youth are students (compared to a regional average of 25%). In addition to traditional universities, the tertiary education system includes *Centros de Formación Técnica* (Centers for Technical Training) and *Institutos Profesionales* (Professional Institutes).

The majority of on-the-job training is provided through “*franquicia tributaria*,” a provision that allows companies to finance training for their employees through tax deductions. As it is easiest for large companies to use this policy, the majority of beneficiaries tend to be professionals with higher education and socioeconomic status than the average worker. The *Servicio Nacional de Capacitación y Empleo* (National Service for Training and Employment, SENCE) also offers short-term courses directed at youth, women, and other vulnerable populations.

#### 1.3.2 Colombia

Despite strong economic growth over the last fifteen years, youth unemployment in Colombia remains high at 14% (compared to a 10% average in the region). More than 20% of youth are NEET. This problem disproportionately affects poor and vulnerable youth, who make up 90% of NEETs, and young women, who often leave school after having a child. About 48% of youth who do have a job work in the formal sector, and this rate is much higher among youth in extreme (95%) or moderate (83%) poverty.

Colombia spends more than any other Latin American country on technical and vocational training: 0.34% of GDP, compared to the regional average of 0.12%. By far the largest training provider is a government agency, the *Servicio Nacional de Aprendizaje* (National Training Service or SENA), which

runs a wide range of training programs, serving about 400,000 students per year (20% of all enrollees in training programs). These programs serve as both complements and substitutes for university education, but there are widespread concerns about their quality and lack of responsiveness to the needs of the private sector. There are also programs run by the Ministry of Employment, the Ministry of Education, the Ministry of Social Protection, and for-profit and non-profit service providers. As Colombia has just ended a decades-long civil war, there is significant interest in supporting and reincorporating both ex-combatants and victims of the conflict into the labor market.

### 1.3.3 Dominican Republic

Compared to other countries in Latin America, the Dominican Republic has very low unemployment and informality rates (2.7% and 22.5%, respectively, for adults in 2014). However, the country stands out for the significant gaps for youth and for vulnerable populations. There is a significant unemployment gap between youth and adults: In 2014, 9.5% of the young population was unemployed—three times the general unemployment rate—and 41% had informal jobs. Furthermore, vulnerable populations are much more likely to lack official identity documents, which are required for most training and formal work opportunities (in the Dominican Republic, registering a child requires providing proof of the mother’s identity, so many native-born Dominicans are undocumented, in addition to illegal immigrants). This contributes to high rates of NEET and informality among the poor: 90% of the NEET young population is poor and vulnerable, and the informality rate among the extreme poor is 66% (OECD, 2016).

During the last decade, the Dominican Republic has consolidated institutions specifically in charge of youth. For example, the *Programa Nacional de Conformación de los Consejos de Juventud* (National Program for Youth Councils) created youth councils in local governments, and the *Programa Juventud y Empleo* (Youth and Employment Program) offers technical and vocational training combining theory and practice. The Ministry of Youth is currently implementing a Strategic Plan (2015-2019) that aims at developing professional skills for the young population.

### 1.3.4 El Salvador

While El Salvador has fairly low unemployment rates (2.4% for adults and 8.5% for youth), inactivity and informality remain significant issues. About 27% of youth are NEET (39% of women and 14% of men). Youth who are employed are more likely to have informal jobs than formal jobs (61% work informally). One of the reasons for the high prevalence of informal jobs may be low levels of human capital (54% of youth ages 15-29 did not complete secondary school) and high levels of violence and insecurity. For many youth, it is too dangerous to work in certain areas or travel to the locations where training programs are held.

One of the main providers of technical and professional training in the country is INSAFORP (*Instituto Salvadoreño de Formación Profesional*, or Salvadoran Institute for Professional Training), a government-supported training institute. In addition, the *Ley General de la Juventud* (General Law on Youth)

requires the government to support training and job creation so that youth are able to find a first job, and the *Ley de Incentivo para la Creación del Primer Empleo* (Law on Incentives for Creating First Jobs) provides tax incentives to private companies who hire young people. Furthermore, as El Salvador is one of the most violent countries in the world, with high rates of gang activity and drug-related violence, many youth skills training programs include “life skills” and violence-prevention components.

### 1.3.5 Mexico

Although Mexico has low unemployment rates (in 2014, 3.3% for adults and 7.7% for youth), rates of informality are among the highest in LAC (in 2014, 56.7% for adults and 69.5% for youth), illustrating that the labor problem does not lie exclusively in the existence of jobs but also in job quality. Since 2009, as Mexico has recovered from the economic crisis, unemployment and NEET rates have decreased. Moreover, the 2012 labor reform law has led to reductions in informality (OECD, 2016). Although these positive trends benefit young populations, the gaps between adults and youth remain large.

Mexico also has a very high rate of youth inactivity. In 2014, the NEET rate for youth between 15 and 29 years was 22%, compared to 15% in the OECD, reflecting the fact that 41% of youth left school without finishing secondary education. A huge percentage of the NEET population (87%) is vulnerable and poor. Furthermore, young women are three times more likely than young men to be NEET, generally doing unpaid domestic work (OECD, 2016).

Mexico spends relatively little on active labor market policies. In 2012, the country spent 0.04% of the GDP on labor training programs, compared to 0.12% in LAC and 0.15% in the OECD. At the national level, some of the most important actors include *Colegio Nacional de Educación Profesional Técnica* (National School for Professional and Technical Education or CONALEP), *PROSPERA* (a cash transfer and social inclusion program), *Instituto Mexicano de la Juventud* (National Institute for Youth, or IMJUVE), and the *Servicio Nacional de Empleo* (National Employment Service or SNE).



## 2 Types of Training

One of the most popular explanations for youth unemployment is skill mismatch: there are skills needed and valued in the labor market, but these are different from the skills that youth have. Providing young people with the right skills through training is therefore seen as a major policy priority. As detailed in the Background section, firms in Latin America and throughout the world often report not being able to find employees with the right skills and attitudes. At the same time, low-skilled youth often work in low-quality and low-paid jobs (OECD, 2015). Equipping young people with the right employability skills is thus seen as a promising approach. <sup>s</sup>

Many countries have implemented training policies and programs aiming to connect youth to the labor market. These include cognitive skills and non-cognitive skills training programs, which may be complemented with on-the-job training. Cognitive skills training includes programs focusing on technical skills, literacy, and/or numeracy. Non-cognitive skills programs focus on behavioral, life, or soft skills. Most training programs have cognitive and non-cognitive components. In this section, we categorize programs based on where they provide greater emphasis.

Overall, the main conclusion arising from the literature is that training has had mixed results. Reviews in Kluve et al., (2016) and Card, Kluve, and Weber (2010, 2015) show that training has had some success in the short-run, particularly for programs that combine classroom and internship-style components. Some studies for developed countries (Fitzenberger, Osikominu, and Völter, 2008; Lechner, Miquel, and Wunsch, 2011) and, more recently, for developing countries, have also documented positive results in the long-run (Attanasio et al., 2015; Ibarraran et al., 2015; Kugler et al., 2015).

Further research is needed to understand why results of training programs are so mixed. Some programs seem to work, but it is still unknown *how* they work. It remains unclear whether training programs are actually improving the skills trainees have or if they are incentivizing trainees to pursue careers in that field. Future research should examine how trainees behave, the alignment between the type of training that trainees seek and the skills that firms demand, and how to communicate firms' needs so that training providers and training centers can make their program more relevant to employers. Implementation details seem to play an especially important role in the success of a program. As such, the bulk of unanswered questions in the literature relate to various implementation details such as the length, quality, and intensity of training, the impact of support services paired with the program like job placement and counselling, private sector engagement, and the alignment of skills to jobs available.

One challenge is that many studies have looked at training as a broad category while there is a lot of heterogeneity in training programs. For example, training programs tend to be very context specific, and it can be especially challenging to draw conclusions across different studies in different contexts. Another example relates to the types of training programs offered. Certain training programs may

prove more useful for youths' specific needs than others do. Additionally, youth may lack the means to find the training programs most suitable for their specific needs. Besides answering the question of whether training improves the labor market prospects of young people, research should explore what makes training a more compelling investment for youth.

Finally, an important consideration for measuring the impact of training programs relates to the overall objectives of the program. For example, using administrative data to measure employment rates and earnings, may underestimate these outcomes because it is more difficult to capture informal employment and wages. Another example relates to quality of employment and underemployment. Research that examines the impact of training courses should examine these issues (formality, underemployment, and quality of employment) and how they differ by gender.

We will review in more detail interventions that provide cognitive and non-cognitive skills training, sometimes combined with on-the-job training, in the next three sections.

## 2.1 Cognitive Skills Training

Cognitive skills are important for achieving high earnings. Evidence shows that employers pay high premiums to employ workers with higher academic skills and that the recent decline in the gender wage gap is linked to an increasing demand for cognitive skills that women tend to possess (Tyler, 2004; Bacolod and Blum, 2010).

Aside from the formal education system (primary through university education), technical and vocational skills training programs are some of the most common cognitive-skills-development programs worldwide. In many cases, these programs attempt to make up for participants' low-quality or incomplete formal education and to teach trade-specific skills. In the Dominican Republic, El Salvador, and Colombia, policymakers noted that the lack of basic language and math skills forms a significant challenge for vocational training providers.

Traditionally offered inside the classroom, technical and vocational training programs often take place outside of a normal work environment. A systematic review of evaluations of these programs shows that technical skills training programs without an on-the-job component have mixed effects on employment outcomes.

The main findings from the studies reviewed in this section are:

1. Classroom trainings have not shown positive results except in very specific cases.
2. Most rigorous impact evaluations of classroom trainings have not provided clear results about their impact on employment, earnings, and skill development.
3. Technical skills training programs, when combined with on-the-job training components, are more promising; however, more research is needed to identify the right model for such programs.

**Some encouraging results have been obtained from the few randomized evaluations that have been conducted on training programs to date.** Schochet, Burghardt, and McConnell (2008) carried out an experimental evaluation of Job Corps, a national training program in the United States for disadvantaged youths. This appears to be one of the few studies in a developed country with clear positive results. The program was designed to provide general education, social skills, parenting and health education, as well as vocational training. Job placement services were also provided. The training took place in local centers, and participants primarily resided at these centers for the duration of their program. About 70% of the control group was enrolled in some other type of non-Job Corps training or schooling. Results showed improved educational attachment: participants spent more time in school or training than they would have had Job Corps not existed. Employment rates and earnings also increased for youth in the treatment group compared to those in the control group in the initial years after training. Program benefits seemed to fade after the first initial years of training, except for the oldest program participants. Furthermore, while individual outcomes improved, the overall cost-effectiveness of the program may be questionable.

Another effective program evaluated by a randomized evaluation mixed academic and social-cognitive skills training for disadvantaged adolescent males in Chicago Public Schools. The evaluation found that providing both individualized academic remedial classes and non-academic training that aim to foster social-cognitive skills significantly increased math test scores, improved expected graduation rates, and resulted in sizable (albeit not statistically significant) reduction in delinquent behaviors during the program year (Cook et al., 2014). However, whether these impacts will persist is an open question.

**Some program have shown time-inconsistent benefits to training programs depending on duration and intensity of the program.** An evaluation from Germany by Lechner, Miquel, and Wunsch (2011) used matching methods to evaluate the short- and long-term effects of vocational training and retraining programs available to the unemployed in Germany between the 1970s and the early 2000s. German training programs offered through the Public Employment Service include a diverse set of programs that mostly consist of full-time courses lasting from several weeks to more than two years. Their findings indicate that all types of training produced negative short-term effects on employment. The magnitude and duration of these effects were directly related to the duration of the program, such that positive effects materialized earlier for shorter programs. Retraining programs, which enabled participants to work in a different field by awarding a new professional degree, took up to three years to show positive effects. The effects of retraining persisted for at least the eight years following training participation.

Another program that demonstrated time-inconsistent benefits is the Turkish National Employment Agency's vocational training program. This large-scale program offers free, short-term courses in a variety of vocations to unemployed individuals in Turkey. In an experimental evaluation of this program, Hirshleifer et al. (2014) reported modest increases in employment (extensive and intensive margins) and, more specifically, in formal employment, one year after the training ended. The impact

was greater for men, who increased their odds of formal work and higher occupational status more than women did. These initial positive effects, however, dissipated three years after the end of the training. The authors argue that these effects may be explained by the structural differences in the country: training seems to increase employment more when done in high unemployment regions than in low unemployment regions.

**Not all interventions evaluate the effect of skills training directly; some programs provide vouchers to help youth pay for training and increase competition among trainers.** In typical training-voucher systems, jobseekers are free to redeem the vouchers with any training providers whose courses satisfy a set of quality standards and are relevant to the jobseekers' training needs.

**Consistent with the findings from the evaluations of cognitive skills programs, training vouchers have mixed effects on employment outcomes, but with some differences that mainly come from the programs' target populations.** For trainees who were already employed, there were no short-term effects, but there were negative effects in the medium- to long-term. For the unemployed, short-term effects were negative and medium- to long-term results were generally positive, depending on the extent of the lock-in period.

In another example in Germany, Huber, Lechner, and Strittmatter (2015) used matching methods to evaluate the effectiveness of awarding vouchers for vocational training programs to unemployed individuals. In 2003, the country introduced a voucher-based allocation system to provide vocational training, replacing the traditional contracting-out system. The evaluation results suggest that the voucher award had a negative average employment effect in the first three years after voucher receipt and a small, positive effect thereafter, with an increased employment probability four years after receiving the voucher. Thus, the initially negative lock-in effect of the voucher system, due to decreased job search, was likely counteracted by higher placement probabilities in later periods.

Another program in Germany, *Bildungsprämie*, was introduced in 2008 and provided vouchers to low-income individuals who were either employed, on parental leave, or job-returnees. The voucher only subsidized work-related training that was not provided by the employer of the voucher recipient, perhaps serving workers who were preparing to change jobs. Görlitz and Tamm (2016) examined the effects of voucher redemption on earnings and employment using difference-in-difference and fixed effects methods. In their empirical strategy, they addressed potential selection issues by constructing a new comparison group, which consisted of non-participants who intended to participate in training but had to cancel their training plans due to a random event. Their results showed that none of the considered employment variables (gross monthly income, (un)employment status, months in (un)employment) were significantly influenced by training 6 to 12 months after voucher redemption.

Although training vouchers directed to the already employed may have no effects in the short run, it is still possible for them to have negative medium-term effects on employment. In a recent study,

Kaplan et al. (2015) examined the impact of the Chilean *Bono Trabajador Activo* (BTA) voucher program using difference-in-difference methods. The voucher program targeted the formally employed population and financed training courses that lasted no more than 6 months. The findings showed that enrolling in a training course using the voucher reduced the probability of being employed and reduced monthly earnings in the formal sector two and a half years after having applied to the BTA. These effects were more pronounced for individuals willing to change economic sectors. The negative results on employment and earnings were likely linked to a long-term lock-in period.

## 2.2 On-the-job Training

Programs in the developing world that combine classroom and on-the-job training have shown some qualified success in the short and long term. Many of the most common programs in Latin America follow this multi-component model. In this section, we review some of these programs. We begin with programs that offer apprenticeships or internships. We then summarize evaluations of programs that offer job placement services or wage subsidies.

### 2.2.1 Apprenticeships and Internships

**Apprenticeships and internships are the most prominent forms of on-the-job training programs.** An apprenticeship is often a long-term training arrangement in which young people train in a specific trade while performing that trade and receive institution-based training. An apprentice is sometimes contractually linked to the employer and receives a wage or allowance. Internships, in contrast, are short-term arrangements that offer a more limited training in the set of skills relevant for an occupation with the purpose of letting a person acquire work experience at a company without necessarily being paid. Interns usually acquire their main knowledge and skills at a training center and only learn supplementary skills through an internship (see UNESCO TVETipedia Glossary). As roundtable participants noted in El Salvador, employers often require previous work experience even for entry-level jobs, so apprenticeships and internships can be effective programs to help youth enter the labor market for the first time.

The main findings from the studies reviewed in this section are that:

1. Cognitive skills training programs complemented with apprenticeships or internships yield positive employment effects;
2. The short-term impacts are mixed and, sometimes, heterogeneous;
3. Some programs show sustained and positive long-term effects;
4. There is evidence of positive spillover effects on education and labor market outcomes of family members; and
5. It is still unknown whether the positive effects of these training programs are due to the vocational training, the apprentice/internship, or the combination of the two.

Six studies illustrate these findings. A randomized evaluation of the Dominican Republic's *Juventud y Empleo* program found that job training that focused on improving vocational skills, followed by a

short internship at a private-sector firm, had a positive effect on wages but not on employment one year after training for trainees that enrolled in 2005 (Card et al., 2011). More recently, Ibarra et al. (2015) estimated the long-term impacts on a cohort of trainees entering the program in 2008. While the formal employability gap between men in treatment and control groups widened and became statistically significant in the fifth year after treatment, the program did not affect employment rates overall.

Another randomized evaluation found stronger impacts of a similar program in Colombia (Attanasio, Kugler, and Meghir 2011). The program, called *Jóvenes en Acción*, involved three months of classroom training undertaken by private agencies, followed by three months of apprenticeship in a private company. The probability of employment rose and wages were, on average, higher for program participants, especially for women. More recent evaluations of the program show sustained long-term effects. Attanasio et al. (2015) found that *Jóvenes en Acción* ensured persistent gains for women. The program had a positive and significant effect on the probability of working in the formal sector eight years after randomization. Beneficiaries of the program were more likely to work for a large firm and their (formal) earnings were also higher. In a cost-benefit analysis, the authors found that the gains were stable over time, with an internal rate of return of 20% for women.

A regional initiative of job training programs for low-income youth in Latin America, led by the International Youth Foundation, is showing some promise. The Argentinean *Entra21* program is one such program. This program provides technical and life-skills training and internships with private sector employers. An experimental evaluation by Alzúa, Cruces, and Lopez (2016) matched experimental baseline data with administrative records that included a detailed and precise record of employment status and earnings for program participants, spanning 8 years before and 4 years after training. Their results indicated gains of about 8 percentage points in formal employment 18 months after training, which were substantially larger for men. Program participants also exhibited earnings about 40% higher than those in the control group, stemming from both higher employment levels and higher wages. These positive short-term results seem to come from an increase in the persistence of employment (i.e. keeping jobs once employed) rather than from more frequent entries into employment (i.e. finding jobs).

Internships have delivered positive results in other countries of the developing world. McKenzie, Assaf, and Cusolito (2016) studied the Enterprise Revitalization and Employment Pilot in Yemen. The program was designed as a 2-year pilot project to place Yemeni youth who had graduated from university or a vocational school in the past 2 years into 6-month internships with firms in Yemen. The program provided a short training in basic skills and matched trainees to internships at firms participating in the program. The applicants attended a 2-day training course on interview skills, basic time management skills, and instructions for key work behaviors. The authors found in their experimental evaluation that receiving training and an internship increased the probability of employment by 42 percentage points one year after training. Men mainly drove these results: female

applicants were less likely to work at all, worked fewer months, and earned less than male applicants in the control group.

Some programs also had positive spillover effects. Kugler et al. (2015) studied the long-term direct and spillover formal education and labor market effects of the *Jóvenes en Acción* program in Colombia. The authors focused on educational outcomes from 2008 to 2013, that is, three to eight years after randomization. Using an experimental evaluation and administrative records, they found that beneficiaries were 1.4 percentage points more likely than non-beneficiaries to complete secondary school one year after training participation, but the effect did not persist after that. Participants were 3.5 percentage points more likely to enroll in formal tertiary education, particularly if they had completed secondary education prior to the training. Beneficiaries were also 1.6 percentage points more likely to remain enrolled in college, with similar retention effects among male and female applicants. The authors also found positive spillover effects. Family members of participants were more likely to complete secondary school and to enroll and remain in tertiary education than family members of non-participants. The authors argued that complementarity between training and formal education resulted from a combination of improved skills and changes in expectations.

**One area that needs more research is whether the positive effects of these training programs were due to the vocational training, the internship, or the combination of the two. Training may improve the productivity of young people, but internships may reveal useful information about the quality of a match between job seekers and firms.**

Apprenticeship and internship programs raise several issues and complications. First, the initial matching of young people to firms may be difficult; youth are often unable to find a firm willing to offer them an apprenticeship contract. This was a problem mentioned by participants in the roundtable discussion in Colombia, where approximately 5,000 youth have completed the classroom portion of *Jóvenes en Acción* (an updated version of the program tested in Attanasio et al. 2015) but have not been matched with an internship. Issues about the contract features, such as the balance of time between the firm and training and the wages offered, likely affect firms' demand for apprentices. Due to the high demand for and difficulty of finding apprenticeships, many young people do not find a firm in their sector of choice and end up working in a different sector. This may sidetrack youth into a type of work for which they are not a good long-term match, even if it reduces short-term unemployment. Under such circumstances, it is unlikely that there would be a "stepping-stone" effect leading to more positive long-term job market outcomes. Therefore, alternative models of long-term vocational training need to be investigated.

One attempt to close this gap was tested in France. Apprentices usually spend two years in an apprenticeship program and divide their time between the workplace and an apprentice-training center. However, getting an apprenticeship position is difficult. To assist young people, the Youth Job Centers developed an intervention to help them find a training firm. Youth were assigned to a mentor who was in charge of developing a good relationship between an apprentice and a tutor within the firm, as well as guiding the youth and the firm concerning the expectations they should have about

each other's demands and behaviors. Crepon et al. (2015) conducted a randomized evaluation of this program and found a significant positive impact on both the probability of signing a contract and on the enrollment in apprenticeship one year after treatment assignment.

Another issue for apprenticeships and internships is the dropout problem. Dropout is endemic to most voluntary training programs, ranging from 5% to 79% in developed countries and 10% to 50% in developing countries (Heckman et al., 2000; Cho et al., 2011). Several explanations might account for failure to complete training requirements. First, low quality of training might affect trainees' expectations of the benefits and costs of training and discourage them from continuing. One study in Peru found that training quality is inversely correlated with the probability of dropping out (Dammert and Galdo, 2013). Second, there might be external constraints such as illness or family obligations that could prevent a young person from continuing training, and these constraints might affect male and female youth differently. For example, one study in Malawi found that young women trainees' participation decisions were more affected by these external constraints than their male counterparts (Cho et al., 2013). Third, if the pay for an apprenticeship or internship is low or zero, some youth may not be able to afford the transport costs of getting to work or the opportunity costs of forgoing a higher-paid (but with possibly worse future prospects) job. In the roundtable discussions in the Dominican Republic, El Salvador, and Colombia, participants emphasized that these costs are major contributors to program dropout and that programs that provide food and transport subsidies or pay a minimum wage have much higher completion rates. Lastly, if the relationship between youth apprentices and managers deteriorates, young people may have to find another firm or may drop out of employment altogether. Young people with limited exposure to work life, especially those coming from more disadvantaged backgrounds, may have insufficient knowledge of the expectations of employers and adequate behavior in the workplace. This often translates into conflicts between employers and employees and short job tenure.

Finally, in countries where the informal economy constitutes a large share of total economic activity, informal apprenticeships and internships may be the only or most effective means of skills training available for youth. However, informally trained youth who are seeking formal sector employment face difficulties in signaling their training to formal employers. Offering a certification for apprenticeships may afford employers a systematic method of recognizing skills acquired during informal training and rectify this information asymmetry (AfDB et al., 2012). In discussion groups in the Dominican Republic, El Salvador, and Mexico, participants emphasized the need for a system of professional certifications. This issue is further reviewed in section 3.

### 2.2.2 Other Employment Programs Involving an On-the-Job Component

Some on-the-job training programs offer job placement services. The Work First (WF) program in the United States was designed to provide short-term, intensive job placement services to low-skilled workers. All contractors working on the program offered a standardized one-week orientation, which included life-skills training. Following orientation, few resources were spent on anything other than rapid placement into jobs. Participants were expected to search for work on a full-time basis.



Contractors monitored participants' job search efforts, referred participants to employers, and hosted recruitment events. Support services intended to aid job retention, such as childcare and transportation, were equally available to participants in all contractors but were provided outside the program. A non-experimental evaluation of the WF program in Detroit, conducted by Autor and Houseman (2010), showed that obtaining any job placement through WF raised the average employment probability and increased average earnings of participants in the short run, but only if the placements were in the form of direct-hire jobs. Temporary-help placements did not increase long-term employment and did not foster long job spells. Temporary-help placements, moreover, reduced job stability by initially raising employment in the temporary-help sector at the expense of opportunities in direct-hire employment.

The New York City (NYC) Summer Youth Employment Program (SYEP) is another job placement program with positive effects on youth. The program targeted youth aged 14 to 21 and provided paid summer employment for up to seven weeks. Over the summer, the program gave participants workshops on job readiness, career exploration, financial literacy, and opportunities to continue education. Participants were then matched to jobs based on their skills, interests, and the restrictions firms imposed on their hiring. A non-experimental evaluation by Gelber, Isen, and Kessler (2016) showed that SYEP participation caused average earnings and the probability of employment to increase in the year of program participation, particularly for individuals working in industries where the most SYEP jobs were provided. More interestingly, SYEP positive effects were largest in disadvantaged groups. The program helped keep youth out of trouble during the summer, as demonstrated by a reduction in both their engagement in crime and the likelihood of mortality.

### 2.3 Non-Cognitive Skills Training

**In contrast with cognitive skills training programs, non-cognitive skills programs focus on behavioral, life, or soft skills.** In terms of the expected outcomes, these programs are aimed at results including but not limited to employment, education, criminality, and interpersonal skills development. In all roundtable discussions, participants repeatedly emphasized that employers can teach job-specific technical skills to new hires but that they look for candidates who have already developed non-cognitive skills such as effective communication, honesty, and teamwork. However, there was skepticism as to whether specific modules in a classroom setting can teach these skills.

**There are important differences in the purpose and target population of non-cognitive skills training programs.** Some interventions emphasize the role of non-cognitive skills on employment outcomes while others view them as complementary to cognitive skills training. Other interventions have a primary goal of reducing criminality and see employment as a means to this end. For instance, in El Salvador, with high rates of violence and insecurity, many programs view crime prevention as a more important objective than employment.

Some encouraging results have been obtained from randomized evaluations of programs that combine cognitive with non-cognitive skills training. A group of studies examine labor and education

outcomes of these programs. Other studies focus on behavioral outcomes. In what follows, we present the results from these studies.

We identify a first set of results that examine labor and education outcomes. The main findings from these results are:

1. Offering non-cognitive skills training, along with technical skills training, improved educational attachment and graduation rates, particularly for the most disadvantaged groups;
2. These training programs had positive effects on labor market outcomes; and
3. Overall, whether the positive impacts will persist is still an open question.

Non-cognitive skills training seems to improve educational outcomes. In the United States, Schochet, Burghardt, and McConnell (2008) carried out an experimental evaluation of Job Corps, a national training program for disadvantaged youth. The program was designed to provide general education, social skills, parenting and health education, vocational training, and job placement services. The training took place in local centers, and participants primarily resided at these centers for the duration of the program. Results showed improved educational attachment: participants spent more time in school or training than they would have had Job Corps not existed. Employment rates and earnings also increased for youth in the treatment group compared to those in the control group (i.e. those excluded from the program) in the initial years after training. Further studies of the Job Corps program suggest that the effects on earnings were heterogeneous at different points of the wage distribution: effects are bounded between 1.9% and 20% for adolescents and between 5.1% and 13% for young adults (Blanco, Flores, and Flores-Lagunes, 2013). However, Job Corps does not seem to be very effective at the lower tail of the wage distribution (Eren and Ozbeklik, 2014). One possible explanation for this result is that high unemployment and strong economic conditions may have overshadowed the gains of Job Corps for the lower quantiles of the earnings distribution.

Another effective program evaluated by a randomized evaluation mixed academic and social-cognitive skills training for disadvantaged adolescent males in Chicago Public Schools. The experimental evaluation found that providing both individualized academic remedial classes and non-academic training that aim to foster social-cognitive skills significantly increased math test scores, improved expected graduation rates, and resulted in sizable (albeit not statistically significant) reductions in delinquent behaviors during the program year (Cook et al., 2014). However, whether these impacts will persist and generate additional effects on employment outcomes is an open question.

Non-cognitive skills training seems to positively affect labor market outcomes and change youth behavior, perceptions, and expectations. A modified version of the Dominican Republic's *Juventud y Empleo* program, launched four years after the Card et al. (2011) evaluation, emphasized life skills and job-readiness and provided better internship-placement support. The experimental evaluation of Ibarra et al. (2014) suggests that the program increased the probability of working in the formal sector for men. The program also had a positive impact on youth perceptions about their current situation and their expectations regarding the future. These results were stronger for women and

younger individuals. *Juventud y Empleo* also seemed to play a protective role for teenage women. Novella and Ripani (2016) found that the program reduced the probability of pregnancy among teenagers by about 8 percentage points, particularly among those women coming from poorer households.

Positive employment effects were observed for a program in Brazil that used an innovative training method. The *Galpao Aplauso* program made extensive use of artistic and theatrical techniques to facilitate the trainees' understanding of concepts and applications. The program targeted youth aged 29 or less living in Rio de Janeiro's slums. Participants in the program received training on vocational or technical skills (300 hours), on academic or basic skills (180 hours), and on socio-emotional skills (120 hours) over a period of 6 months. The program did not offer formal apprenticeships, but it provided informal contracts with private-sector partners and partnerships with local firms. Calero et al. (2016) conducted an experimental evaluation of the program effects on employment and earnings. They found positive and statistically significant increases of about 38% in employment rates and 40% in monthly earnings in the medium-term. Contrary to other training programs in Latin America, *Galpao* did not have any effects on formal employment. One possible explanation for this result is the lack of structured internships in the program, as youth were mostly left on their own to find jobs. In evaluating the program's model, the authors explored the role of socio-emotional traits on labor market outcomes. They found that youth with high socio-emotional skills seemed to benefit more from the program than did their peers with low socio-emotional skills. Some of those positive effects may have been due to a signaling effect by which completion of the program served as an indicator of the youth' cognitive and socio-emotional skills.

Another example of a program where non-cognitive skills training is complementary to technical training is the study of Blattmann and Annan (2016) in Liberia. They found that a package of interventions that aimed to integrate young ex-combatants into the labor market was successful in encouraging entry into agriculture. The program took place at residential agricultural training campuses and included three to four months of coursework, practical training, psycho-social counseling, and life skills classes. Counseling and life skills classes focused on reframing and understanding wartime actions, dealing with symptoms of traumatic stress, managing anger, and resolving disputes peacefully. Participants received meals, lodging, clothing, basic medical care during the training, and agricultural tools and supplies (trainees had a choice between animal-raising and vegetable-farming) at the end of the training. The overall results from the experimental evaluation suggest large treatment effects on occupational choice: a 26% increase in agricultural work along with an increased interest in agriculture as a career. Other results show that the program reduced participants' involvement in mercenary recruitment activities, increased support from friends and family, and increased positive peer group characteristics.

Although most programs showed positive results, another unanswered question is what constraints may deter some programs from working as expected. In Jordan, the *New Opportunities for Women* program trained young women graduating from community colleges to enhance their interpersonal

skills. The free intervention consisted of intensive training in areas identified by Jordanian employers as essential: effective communication and business writing skills (e.g. making a presentation, writing business reports, different types of correspondence); team building and teamwork skills (e.g. characteristics of a successful team, how to work in different roles within a team); time management; and positive thinking. The training course took 5 hours per day and lasted 9 days. Groh et al. (2016) conducted an experimental evaluation of this program and found no effect on labor force participation, employment, and earnings, for 6, 14, and 27 months after training. Possible reasons for the lack of effectiveness of this program include the short duration of the training and that the training offered did not affect the soft skills as expected.

We identify a second group of studies for which developing non-cognitive skills was an important objective of the program (rather than just a means to improve employment outcomes) and the evaluation focused on behavioral outcomes. These studies showed that:

1. These programs had mixed effects on anti-social behaviors;
2. These programs seem to work better when they gave youth opportunities to improve their economic situation through any type of work experience; and
3. The specific elements of the interventions that produced the decrease in anti-social behaviors have yet to be characterized.

The following three studies help illustrate these points.

Summer jobs in the United States also offers an alternative to develop soft skills and reduce delinquency among youth. At-risk youth in Chicago struggling in the labor market were offered paid employment through the One Summer Plus program under the mentoring and advice of adults who helped them learn to be successful employees and to navigate barriers to employment. For the randomized evaluation, a group of participants were also offered social-emotional learning therapy, which focused on emotion and conflict management, social information processing, and goal setting. Heller (2014) found that violent-crime arrests among the treatment group decreased by 43% relative to the control group. The effects persisted 13 months after the program was over, and this estimate was larger than at the end of the summer. The therapy component of the program, however, did not seem to have made a substantial difference for disadvantaged youth. Yet, the specific elements of the intervention that produced the decrease in violence are still unknown and deserve further research.

In contrast, the evidence points to mixed results in developing countries. An experimental evaluation in Liberia investigated the behavioral effects of late-stage non-cognitive investments. Blattman, Jamison, and Sheridan (2015) ran two interventions targeting young males aged 18 to 35 who were either actively involved in crime, interpersonal violence, and drugs, or at risk of engaging in these activities. The first intervention was an 8-week program of group cognitive behavioral therapy that was offered through lotteries. The second one was a simple US\$200 grant, also offered by lottery. Some participants received just the therapy program, some just received the cash, some received both, and some received neither. This allowed the researchers to see if therapy affected participants' economic decisions or stimulated legal self-employment. The combination of therapy and cash

seemed promising. Consumption and earnings increased among those receiving cash alone or cash following therapy, although the effects dissipated after one year. The cash-alone treatment did not lead to a statistically significant or sustained reduction in overall antisocial behaviors, but therapy did. This reduction in antisocial behaviors persisted, however, only when therapy was followed by cash.

An evaluation of the *Galpao Aplauso* program examined the impact of training on risky behavior. Calero and Rozo (2016) focused on outcomes such as smoking, alcohol consumption, drug consumption, participation in fights, and crime victimization. They also studied socio-emotional skills, as measured by the Social and Personal Competencies Scale (six competencies, including self-esteem, empathy, and leadership) and the Grit Scale (including effort, enthusiasm about long-term goals, consistency of interests, and ambition). Results, however, did not seem very promising in the short run. Calero and Rozo found that the probability of smoking or being a victim of a crime increased for the individuals treated by the program, perhaps due to a positive income effect. This negative effect on risky behavior was paired with null effects on socio-emotional skills or cognitive skills. Reassuringly, treated individuals with higher levels of socio-emotional skills had lower probabilities of consuming alcohol, participating in fights, and being victims of crime.

In sum, non-cognitive skills are important for employment and behavioral outcomes, and there is some evidence showing it is possible to train youth in these skills. In Latin America, both policymakers and employers recognize the importance of non-cognitive skills for on-the-job performance, but it is still unclear what the best ways are to develop these skills, especially for youth from disadvantaged backgrounds.

We need to understand why the impacts of training programs are so mixed. One possibility, as demonstrated by the range of programs reviewed in this section, is that training programs vary significantly in their components, objectives, and implementation. Certain types of training programs may prove more useful for youths' specific needs than other training programs. In the next section, we review features of the program design and implementation to help answer this question.

### 3 Program Design and Implementation Features

Differences in the design and implementation of training programs may explain some of their mixed results. This review discusses three key design and implementation features:

1. Targeting and demand for training;
2. Retention;
3. Quality and signaling of programs; and
4. The role of the private sector in the design and/or implementation of programs.

We review each of them in the following sections.

#### 3.1 Targeting and Demand for Training

**Targeting training programs to youth with the highest potential to benefit from them is an important implementation feature.** In many contexts, caseworkers assign youth to a specific training course, and assignments may depend more on programs available in the participant's geographic area than on the participant's strengths and interests. In El Salvador, roundtable participants commented that many women are encouraged to learn jewelry making, even though this may not be a good fit for all women. In Colombia, participants mentioned that programs enroll all youth who express interest, without examining if the particular program would be a good fit.

**Even when they have the agency to select a program for themselves, youth may struggle to choose the best training path.** Babcock et al. (2015) reviewed key implications of behavioral economics to explain the effectiveness of job training programs in the United States. The authors highlight that the choice to be trained, the selection of a field to be trained in and a training provider, and completion of training, represent an intrinsically challenging sequence of choices and actions for young people. In consequence, individuals imperfectly optimize and struggle to start and complete training activities. This generates an inefficient screening for program entry and completion that potentially leaves behind youth who are least able to find training opportunities.

**Several experimental evaluations have examined what influences individuals' decisions to participate in training programs.** In one such study, Dasgupta et al. (2015) invited women living in South Shahdara, India to participate in two experimental games. The first game was designed to evaluate subjects' attitudes toward risk (investment game). The second game was designed to investigate the inherent competitiveness of subjects (competition game). Their findings suggest that women who have a greater preference for risk and are more competitive have a higher propensity to apply for a vocational training program in tailoring and stitching. Additionally, younger women with prior experience in stitching and tailoring and those who belonged to households with higher income had a significantly higher probability of applying to the program.

Another study measured how personality traits such as locus of control may influence investments in training. Caliendo et al. (2016) propose and test a model of training that incorporates workers' locus of control into the investment decision. The model predicts that internal workers will engage in more general training than their external co-workers because their subjective investment returns are higher. Because the returns to specific training largely accrue to firms rather than workers, the relationship between specific training and locus of control is not substantial. To empirically test these predictions, Caliendo et al. use data from the German Socioeconomic Panel, which includes a set of questions on transferability of skills, and fixed effects methods. Results indicate that a one standard deviation increase in internal locus of control is associated with a 4.2 percentage-point increase in the chances that a worker undertakes some form of training. They also find that locus of control is related to participation in general (1.6 percentage points) but not specific training (low and not significant). Locus of control influences participation in general training through its effect on workers' expectations about future wage growth rather than through training costs or post-training productivity.

**A related question is how to best foster demand for training among young people. Evidence—quantitative as well as anecdotal—shows that the demand for training is very low.** For instance, in Mexico roundtable participants noted that many youth are highly present biased, and therefore prefer to work a low-paying, informal job rather than participate in a training course that could lead to higher future earnings. In sub-Saharan Africa, youth entrepreneurs in the informal economy have limited information about relevant training programs and are reluctant to enroll, since being away from work reduces sales and jeopardizes their business (Haan and Serriere, 2002). In developed economies, some evidence suggests that training is seen almost as a disadvantage. For example, Black et al. (2003) showed that the threat of training may induce people to exit from unemployment programs. This may also reflect a low perceived value of skills as a way to find a job—actual value of skills notwithstanding—as compared to the perceived value of having a good network.

**More tailored targeting processes may help to ensure that training programs are available to the most relevant potential participants and that those individuals are motivated to enroll in the programs.** Strategies could include providing youth with information about skills needed in different sectors, allowing them to upgrade their skills on their own, providing stronger mentorship and guidance, and offering youth vouchers to finance a training of their choice. Research that tests the effectiveness of these various targeting strategies would be a valuable contribution to the literature on training programs.

One study examined the impact of voucher programs to test if demand for training increased when credit constraints were relaxed. Hicks et al. (2013) evaluated a randomized voucher program for vocational and technical training institutions in Kenya. The program provided a restricted voucher, which could be used to enroll in a public institution, and an unrestricted voucher, which could be used to enroll in either a private or a public institution. The voucher program increased enrollment rates in vocational schools. While 79% of individuals offered unrestricted vouchers and 69% of those

offered restricted vouchers attended vocational training, fewer than 4% of the control group reported having enrolled in any vocational training. These results indicate that unrestricted vouchers lead to better matches between individuals and institutions.

It is probable that individuals underestimate the value of training. Further research is needed to address the issue of take-up in training programs and to have a better understanding of the determinants of the demand for training programs. Tools to address demand issues may be worthy of experimentation and evaluation.

### 3.2 Retention

**Once youth are enrolled in a program, another key question is how to encourage them to complete the training. Training programs seem to deliver positive results when participants are encouraged to complete the training.** Using an experimental evaluation in India, Maitra and Mani (2016) estimated the economic returns from participating in a subsidized vocational education program in stitching and tailoring targeted at women aged 18 to 39 years residing in low-income households. The program required participants to attend classes two hours per day for five-days a week over six months. To increase their commitment and encourage regular attendance, women were required to deposit 50 rupees per month with the promise of repayment of 350 rupees if they stayed through the entire duration of the program. The effects on program *completion* (attending consistently, taking the final exam, and receiving a certificate) suggest that, in the 6-month post-intervention period, training increased casual or full-time wage employment by 7 to 11 percentage points, hours of work by 4 hours, and earnings. The treatment effects on employment, hours worked, and earnings were all sustained over the next year. The authors further found that not having completed secondary education and living far away from the training center were the main barriers to program completion.

The study by Hicks et al. (2013) described above, which evaluated voucher programs for vocational and technical training institutions in Kenya, found that, beyond increasing enrollment, voucher programs increased program retention. Individuals with unrestricted vouchers completed 12 percentage points more coursework than individuals with restricted vouchers, most likely due to the better individual-institution matches that resulted from the wider range of institution choice and the higher quality of private institutions. The results indicate that voucher programs can be effective in increasing youth educational attainment.

Given the high dropout rates within training programs, further research that tests methods to increase retention would be useful.



### 3.3 Quality

Training program quality varies considerably, and there is often a tradeoff between offering high-quality training to a few people and offering cheap training to a larger set of people. Low-quality training may also be more common since trainers often have poor incentives to provide youth with the right skills. For instance, in Chile, program implementers are incentivized to focus on attendance rather than on learning or long-term employment outcomes.

The literature is scarce on studies that specifically discuss the issue of training-program quality. The main findings from the available studies are that:

1. Quality matters and helps to improve the employment prospects of youth;
2. Quality depends on the incentives provided to training centers, and further research should test how to incentivize high quality training; and
3. Quality needs to be signaled, and future research should examine the best ways to communicate a candidate's skills.

One salient study is that of Haan and Serriere (2002), who examine a number of training programs focused on informal sector employment in five countries in West and Central Africa. They find that most training programs and vocational institutions failed to focus on-the-job relevant technical training that youth desired. Furthermore, since training programs and vocational institutions are extremely underdeveloped and inaccessible to most youth in Africa, apprenticeships constitute over 90% of all training, but low levels of education among both the teachers and the students restrict the ability of students to obtain the necessary skills and knowledge to obtain employment. If teachers are paid a yearly fee for each apprentice, they have incentive to keep apprentices for as long as possible. Often teachers delay teaching apprentices skills crucial to the trade, and they even take proactive measures to prevent apprentices from learning.

Haan and Serriere (2002) cite restructuring incentive systems for apprenticeships, improving the quality and accessibility of alternative training programs, and offering greater training choices for youth as promising ways to improve the employment prospects of youth in developing countries. Many interviewed entrepreneurs mentioned that in addition to trade-specific technical skills, training programs should teach youth general business skills such as bookkeeping, management, and marketing. Training programs that develop short courses which focus on technical skills have greater take-up rates and increase household income substantially. In Niger, a post-primary training school increased pass rates on a national exam. In Cameroon, a widespread training program coupled with financial assistance helped 54,000 people find employment. Since these findings were non-experimental, it is unclear whether selection bias could have confounded the results (Haan and Serriere, 2002).

Another study that highlights the importance of quality is that of Dammert and Galdo (2013). They used data from the *PROJOVEN* program, a training initiative that since 1996 has served

more than 50,000 disadvantaged youth in Peru. The *PROJOVEN* program targets individuals aged 16–25 with poor attachment to the labor market. The experimental evaluation data shows that only 47% of the trainees completed the full 6-month treatment. Large gender differences were observed in the data since 41% of men and 51% of women completed the treatment. The authors collected data on multiple variables related to the quality of the training services to compose a quality index score, including: expenditures per trainee, class size, infrastructure, equipment, teacher characteristics, curricular structure, and market knowledge. All individuals attending the same training program received the same institution quality score. There was, however, a large separation between high- and low-quality courses within any given training program: estimated scores ranged from  $-4.87$  to  $4.22$  with a standard deviation of  $1.75$ . A conclusion of the study is that program quality affected completion in voluntary training programs. Training quality might affect a trainee’s valuation of expected benefits and costs of training and the connection between training centers and productive firms, which in turn affect trainees’ ability to complete on-the-job training requirements.

**Assuming trainees are able to acquire valuable skills through training programs, another challenge they may face is how to communicate their skills to potential employers.** Large variation in the quality of skills training programs might make employers particularly hesitant to hire graduates from these programs. For instance, in Colombia and Mexico roundtable participants noted that employers lack information about training programs and the skills that program graduates have acquired. This is particularly relevant for youth, who might lack other means to signal their quality as a candidate, such as references from previous jobs.

One potential explanation for the positive employment effects of training programs is the “certification effect,” which signals the trainees’ skills to potential employers. One example of a positive certification effect is the *Akazi Kanoze* program in Rwanda, which emphasizes skills certification as an important quality assurance mechanism for employers. The program provides youth (ages 14 to 35) with work readiness and entrepreneurship training in addition to internship opportunities for on-the-job learning, job placement services, and/or business start-up coaching. Alcid’s (2014) experimental evaluation of the program shows that treated youth in rural areas were more likely to be employed after graduation, mainly in temporary or part-time jobs. Participants achieved significant gains in work readiness skills development and financial management, which allowed them to find new jobs faster than non-participants. The *Akazi Kanoze* certificate also helped participants enter the workforce, particularly those who did not have primary or secondary school certificates.

In the Dominican Republic and Colombia, roundtable participants commented that programs themselves lack information about the quality of training they provide, so improving monitoring and evaluation practices may be a first step to improving and signaling quality.

Two key open questions remain:

1. How can training programs reveal information about their quality to youth and employers to help them assess the programs' quality and relevance?
2. How can training programs improve their signaling mechanisms to make graduates attractive to firms?

**Overall, more research is needed to determine the best ways to provide information to firms on the quality of training that applicants have received. Additionally, future research should examine what factors contribute to high-quality training and how to communicate training-program quality.** It would be a valuable addition to the existing literature to conduct experiments in which some trainers receive incentives to provide high-quality training while others do not.

### 3.4 Private Sector

**Another key feature of training programs is the extent and nature of private sector involvement.** While the public sector still operates most of the employment programs around the world, within Latin America there is significant variation from country to country. In Colombia, for example, the majority of job skills training occurs through the public *Servicio Nacional de Aprendizaje* (National Learning Service, or SENA), while in Chile, most training occurs through private implementers that receive government subsidies.

**Card et al. (2015) report that public sector programs do not usually perform well and labor market outcomes of their participants are poor.** This result is possibly explained by the lack of an intensive skill-building component in these programs, which makes private sector employers hesitant to hire their trainees. Another explanation is that it might be easier to provide incentives for high quality programming through contracts with the private sector.

**Private sector engagement might ensure that training programs are more customized to the immediate needs of the labor market.** Public sector entities, such as CONALEP in Mexico and SENA in Colombia, aim to align course offerings with labor market demands, but according to roundtable participants, they can be slow to adjust and lack information about labor market demands in certain regions.

**Evidence from existing research suggests that programs are more successful when the private sector is involved in developing the curriculum or training methods or in providing on-the-job training via internships or apprenticeships.**

In the evaluation of the Turkish National Employment Agency's vocational training programs, Hirshleifer et al. (2014) found that the positive effects of training on short-term employment seemed strongest when courses were offered by private providers that had both the incentives and ability to

respond to market demands. The experimental evaluation suggests that training resulted in a 4 to 6 percentage-point larger increase in employment in private courses than in public courses one year after training.

The Latin American programs reviewed in section 2 all had a design that ensured active private sector involvement, either as a training provider or a potential employer. The private sector usually took part in the design of training content, securing correspondence between the skills taught and those demanded (see, for example, *Jóvenes en Acción* in Colombia, and *Entra21* in Argentina). Selection of training providers was demand-driven through a stringent, competitive bidding process, with the extra requirement of facilitating work experience through internships (see, for example, *Juventud y Empleo* in the Dominican Republic).

The *Adolescent Girls Employment Initiative* (AGEI) in Nepal is another program that had active participation from the private sector. Training providers were selected through a competitive bidding process, offered a bonus payment based on the number of trainees who got a job six months after completing the training, and offered a second bonus for training and placing participants from the most disadvantaged groups (Chakravarty et al., 2016). Results from a non-experimental evaluation show a positive and significant effect on employment, with an increase in the rate of participation in non-farm income-generating activities of about 16 percentage points.

**Programs implemented and/or managed by the private sector showed positive results**, even in the absence of a comprehensive selection process of training providers. One example is the *Empowerment and Livelihood for Adolescents* (ELA) program in Uganda. The ELA program targeted adolescent girls, offering life skills and vocational training. The vocational skills training comprised a series of courses on income generating activities. The vocational training modules were taught by entrepreneurs engaged in the respective trades or by hired professionals. The experimental evaluation showed that young women were more likely to be engaged in income generating activities, primarily self-employment (Bandiera, et al., 2014). Girls' aspirations and opinions about marriage and childbearing also shifted. Adolescent girls in treated communities reported significant higher wages for women and men, a reduction in the preferred number of children, and an increase in the most suitable age for women to have their first child.

**Despite the promising evidence from programs with private sector engagement, a remaining open question is: how can training programs most effectively provide youth with the skills relevant to the labor market?** In Mexico, participants suggested that corporate social responsibility initiatives might be effective ways to involve the private sector in program design and motivate the private sector to hire youth. However, the best strategies to engage youth with their potential employers in the private sector are still unknown. The increasing involvement of the private sector in employment programs may inform how to improve the effectiveness of vocational skills training programs. While relying on the private sector for training provision may have some advantages, another pressing question is how to observe and measure quality and write contracts based on quality delivery.

## 4 Conclusion

Despite significant investments in skills training programs worldwide, there is very little rigorous evidence on these programs. Training is widely seen as a promising intervention given the idea that skill mismatch is a first-order issue. However, results on job training programs have been quite mixed. In Latin America, randomized evaluations have found qualified success for training programs that combine classrooms with internship-style components. Results from the United States tend to show that training involving on-the-job sessions are more successful. Little is known about how to promote high-quality training. Training raises many of the same issues as education and career choices: effectively matching young people with training programs, fostering demand among young people for training, and dealing with dropout problems.

Future investments in research and experimentation may focus on the following open questions:

1. What is the optimal structure of job training programs? How long should youth remain in training programs to fully develop their skills? Is there an ideal combination of in-classroom and on-the-job training?
2. How can we teach students “soft” skills that will help them work in teams, proactively solve problems, and innovate in their future jobs?
3. What can training programs offer youth and employers to help them assess the quality and relevance of the training participants receive?
4. Why is demand for training programs low? What are the greatest barriers to participating in training programs and what are the most effective way to address them?
5. How can we improve the quality of what students learn in vocational training programs? How can we improve the content of these programs? Do we need to select or prepare instructors differently?
6. How can targeting of youth employment programs be improved to identify youth who are likely to benefit from these programs? How can youth be informed about which options are best for them?
7. What is the best way to provide targeted information to youth about existing training options and the labor market impacts of those programs?
8. How can we connect educational institutions and potential employers to ensure that training provides adequate skills for the job market?

9. Are young people's expectations and aspirations mismatched with the realities of the labor market? Can providing youth with information about the realities of the labor market help them to make better decisions?
10. Can helping youth navigate the transition to the labor force improve other aspects of their well-being, such as psychological and emotional well-being, health, and participation in criminal activities?

## 5 References

- 2013 Labour Overview: Latin America and the Caribbean. International Labour Organization.
- AfDB, OECD, UNDP, and UNECA (2012). African Economic Outlook.
- Alaimo, Verónica, Mariano Bosch, David Scott, Kaplan, Carmen Pagés, and Laura Ripani. *Empleos Para Crecer*. Washington D.C.: Inter-American Development Bank, 2016.
- Alcid, A. (2014). A Randomized Controlled Trial of Akazi Kanoze Youth in Rural Rwanda. Education Development Center Report.
- Alzúa, M., Cruces, G., & Lopez, C. (2016). Long-Run Effects of Youth Training Programs: Experimental Evidence from Argentina. *Economic Inquiry*, 54(4), 1839-1859.
- Attanasio, O., Guarin, A., Medina, C., & Meghir, C. (2015). Long Term Impacts of Vouchers for Vocational Training: Experimental Evidence for Colombia. NBER Working Paper Series, 1-38.
- Attanasio, O., Kugler, A., & Meghir, C. (2011). Subsidizing Vocational Training for Disadvantaged Youth in Colombia: Evidence from a Randomized Trial. *American Economic Journal: Applied Economics*, 3(3), 188-220.
- Autor, D., & Houseman, S. (2010). Do Temporary-Help Jobs Improve Labor Market Outcomes for Low-Skilled Workers? Evidence from "Work First". *American Economic Journal: Applied Economics*, 2(3), 96-128.
- Bacolod, M. & Blum, B. (2010) Two Sides of the Same Coin U.S. "Residual" Inequality and the Gender Gap. *Journal of Human Resources*, 45(1), 197-242.
- Bandiera, O., Burgess, R., Goldstein, M., Buehren, N., Gulesci, S., Rasul, I., & Sulaiman, M. (2014). Women's Empowerment in Action: Evidence from a Randomized Control Trial in Africa. Unpublished Draft, 1-35.
- Black, D, Smith, J., Berger, M. & Noel, B. (2003). Is the Threat of Reemployment Services More Effective than the Services Themselves? Evidence from Random Assignment in the UI System. *American Economic Review*, 93(4), 1313-1327
- Blanco, G., Flores, C., & Flores-Lagunes, A. (2013). The Effects of Job Corps Training on Wages of Adolescents and Young Adults. *The American Economic Review*, 103(3), 418-422.
- Blattman, C., & Annan, J. (2016). Can Employment Reduce Lawlessness and Rebellion? A Field Experiment with High-Risk Men in a Fragile State. *American Political Science Review*, 110(1), 1-17.
- Blattman, C., Jamison, J., & Sheridan, M. (2015). Reducing Crime and Violence: Experimental Evidence from Cognitive Behavioral Therapy in Liberia. NBER Working Paper, 21204.

- Borkum, E., Mamun, A., Marco, L., & Mubeen, M. (2015). Evaluation of the Vocational Training Grant Fund in Namibia: Baseline Report. *Mathematica Policy Research.*, 1-40.
- Calero, C., & Rozo, S. (2016). The Effects of Youth Training on Risk Behavior: The Role of Non-Cognitive Skills. *IZA Journal of Labor & Development*, 5(12), 1-27.
- Calero, C., Gonzalez, V., S., Y.S.D., Kluge, J., & Corseuil, C. (2016). Can Arts-Based Interventions Enhance Labor Market Outcomes Among Youth? Evidence from A Randomized Trial in Rio De Janeiro. *Journal of Labour Economics*.
- Caliendo, M., Cobb-Clark, D., Seitz, H., & Uhlendorff, A. (2016). Locus of Control and Investment in Training. *IZA Discussion Paper No. 10406*, 1-51.
- Card, D., Ibarraran, P., Regalia, F., Rosas-Shady, D., & Soares, Y. (2011). The Labor Market Impacts of Youth Training in the Dominican Republic. *Journal of Labor Economics*, 29(2), 267-300.
- Card, D., Kluge, J., & Weber, A. (2010). Active Labour Market Policy Evaluations: A Meta-Analysis. *The Economic Journal*, 120(548), F452-F477.
- Card, D., Kluge, J., & Weber, A. (2015). What Works? A Meta-Analysis of Recent Active Labor Market Program Evaluation. *NBER Working Paper No. 21431*.
- Chakravarty, S., Lundberg, M., Danchev, P., & Zenker, J. (2016). The Role of Training Programs for Youth Employment in Nepal: Impact Evaluation Report on The Employment Fund. *The World Bank Policy Research Working Papers*, 1-40.
- Cho, Y., Kalomba, D., Mobarak, A. M., & Orozco, V. (2013). Gender Differences in the Effects of Vocational Training Constraints on Women and Drop-Out Behavior. *The World Bank Policy Research Working Paper*, 1-48.
- Cook, P., Dodge, K., Farkas, G., Fryer, R., Guryan, J., Ludwig, J., Mayer, S., Pollack, H., & Steinberg, L. (2014). The (Surprising) Efficacy of Academic and Behavioral Intervention with Disadvantaged Youth: Results from a Randomized Experiment in Chicago. *NBER Working Paper No. 19862*.
- Crepon, B., Le Barbanchon, T., Naegele, H., Rathelot, R., and Zamora, P. (2015). What Works for Young Disadvantaged Job Seekers: Evidence from a Randomized Experiment. *Unpublished Draft*.
- Dammert, A., & Galdo, J. (2013). Program Quality and Treatment Completion for Youth Training Programs. *Economics Letters*, 119, 243–246.
- Dasgupta, U., Gangadharan, L., Maitra, P., Mani, S., & Subramanian, S. (2015). Choosing to Be Trained: Do Behavioral Traits Matter? *Journal of Economic Behavior & Organization*, 110, 145-159.



- Eren, O., & Ozbeklik. (2014). Who Benefits from Job Corps? A Distributional Analysis of An Active Labor Market Program. *Journal of Applied Econometrics*, 29(4), 586-611.
- Fitzenberger, B., Osikominu, A., & Volter, R. (2008). Get Training or Wait? Long-Run Employment Effects of Training Programs for the Unemployed in West Germany. *Annales d'Economie et de Statistique*, 91/92, 321-355.
- Görlitz, K., & Tamm, M. (2016). The Returns to Voucher-Financed Training on Wages, Employment and Job Tasks. *Economics of Education Review*, 52, 51–62.
- Galasso, E., Ravallion, M., & Salvia, A. (2004). Assisting the Transition from Workfare to Work: A Randomized Experiment. *Industrial and Labor Relations Review*, 58(1), 128-142.
- Gelber, A., Isen, A., & Kessler, J. (2016). The Effects of Youth Employment: Evidence from New York City Lotteries. *The Quarterly Journal of Economics*, 131(11), 423-460.
- Groh, M., Krishnan, N., McKenzie, D., & Vishwanath, T. (2016). The Impact of Soft Skills Training on Female Youth Employment: Evidence from a Randomized Experiment in Jordan. *IZA Journal of Labor & Development*, 5(9), 1-23.
- Haan, H.C. & Serriere, N. (2002). Training for Work in the Informal Sector: Fresh Evidence from West and Central Africa. International Training Centre of the International Labour Organization.
- Heckman, J.J. (2000). Policies to Foster Human Capital. *Research in Economics*, 54(1), 3-56.
- Heller, S. (2014). Summer Jobs Reduce Violence among Disadvantaged Youth. *Science*, 346(6214), 1219-1223.
- Hicks, J. H., Kremer, M., Mbiti, I., & Miguel, E. (2013). Vocational Education in Kenya: Evidence from A Randomized Evaluation Among Youth. Unpublished draft, 1-40.
- Hirshleifer, S., McKenzie, D., Almeida, R., & Ridao-Cano, C. (2014). The Impact of Vocational Training for the Unemployed: Experimental Evidence from Turkey. *The Economic Journal*, 126, 2115–2146.
- Huber, M., Lechner, M., & Strittmatter, A. (2015). Direct and Indirect Effects of Training Vouchers for the Unemployed. IZA Discussion Paper No. 9138, 1-39.
- Ibarraran, P., Kluge, J., Ripani, L., & Rosas, D. (2015). Experimental Evidence on the Long-Term Impacts of a Youth Training Program. IZA Discussion Paper Series, No. 9136.
- Ibarraran, P., Ripani, L., Taboada, B., Villa, J., & Garcia, B. (2014). Life Skills, Employability and Training for Disadvantaged Youth: Evidence from A Randomized Evaluation Design. *IZA Journal of Labor and Development*, 3(10), 1-24.
- ILO (2013). “Diagnóstico del Empleo Juvenil en El Salvador 2013.” International Labor Organization, 2013. <[http://www.ilo.org/wcmsp5/groups/public/---ed\\_emp/---ed\\_emp\\_msu/documents/genericdocument/wcms\\_231527.pdf](http://www.ilo.org/wcmsp5/groups/public/---ed_emp/---ed_emp_msu/documents/genericdocument/wcms_231527.pdf)>

- J-PAL (2014). Youth Initiative Review Paper. Cambridge, MA: Abdul Latif Jameel Poverty Action Lab.
- Kaplan, D., Novella, R., Rucci, G., & Vazquez, C. (2015). Training Vouchers and Labor Market Outcomes in Chile. IDB Working Paper Series, IDB-WP-585.
- Kluve, J., Puerto, S., Robalino, D., Romero, J., Rother, F., Stöterau, J., Weidenkaff, F., & Witte, M. (2016). Do Youth Employment Programs Improve Labor Market Outcomes? A Systematic Review. IZA Working Paper No. 10263.
- Kugler, A., Kugler, M., Saavedra, J., & Herrera, L. (2015). Long-Term Direct and Spillover Effects of Job Training: Experimental Evidence from Colombia. NBER Working Paper Series, 1-46.
- Lechner, M., Miquel, R., & Wunsch, C. (2011). Long-Run Effects of Public Sector Sponsored Training in West Germany. *Journal of the European Economic Association*, 9(4), 742-784.
- Maitra, P., & Mani, S. (2016). Learning and Earning: Evidence from a Randomized Evaluation in India. *Labour Economics*.
- Manpower Group (2015). Talent Shortage Survey Research Results, Milwaukee.
- McKenzie, D., Assaf, N., & Cusolito, A. P. (2016). The Demand for, and Impact of, Youth Internships: Evidence from a Randomized Experiment in Yemen. *IZA Journal of Labor & Development*, 5(1), 1-15.
- Novella, R., & Ripani, L. (2016). Are You (Not) Expecting? The Unforeseen Benefits of Job Training on Teenage Pregnancy. *Journal of Labor & Development*, 5(19), 1-18.
- OECD (2015a). Skills Outlook on Youth, Skills and Employability.
- OECD (2015b). "Enhancing Job Quality in Emerging Economies." *OECD Employment Outlook 2015 OECD Employment Outlook (2015): 211-62*. Print.
- OECD (2016). "Perspectivas Económicas De América Latina 2017." *Perspectivas Económicas De América Latina*, OECD, 10, 2016. doi:10.1787/leo-2017-es.
- Schochet, P., Burghardt, J., & McConnell, S. (2008). Does Job Corps Work? Impact Findings from the National Job Corps Study. *American Economic Review*, 98(5), 1864-1886.
- Tyler, J. (2004). Basic Skills and The Earnings of Dropouts. *Economics of Education Review*, 23(3), 221-235.
- UNESCO TVETipedia Glossary. Available Online at <http://www.unevoc.unesco.org/go.php?q=TVETipedia+Glossary+A-Z>. Last accessed March 24, 2017.

## Appendix: Description of Contextualization Exercise

In order to contextualize the findings of this global literature review to Latin America, we held roundtable discussions with relevant actors in youth employment in five countries: Chile, Colombia, the Dominican Republic, El Salvador, and Mexico.

The findings from these events have been incorporated into the main body of the white paper. In this appendix, we provide additional detail on the participants and key takeaways from each of these events.

### Chile

**Date:** March 22, 2017

**Location:** Santiago, Chile

**Participating organizations:** National Training Service (Servicio Nacional de Capacitación, SENCE), Chilean Construction Guild (Cámara Chilena de Construcción), Adecco, Fundación Emplea, Fundación Cristo Vive, Forja Chile, Fundación Chile

**Additional interviews:** SQM, Nestlé Chile, Laboratoria

#### Main discussion topics:

- Skills gap
- Quality of training programs
- Take-up and dropout in training programs

#### Key takeaways:

- In Chile, the discussion around soft and hard skills is too dichotomous. These two types of skills complement each other and should be taught together (for example, adding a module on “soft skills” is not effective). Soft skills should be taught earlier on (beginning in elementary school) and teachers need to be better trained to do this.
- In addition to a skills mismatch, there is a gap in expectations and desires between youth and firms. Firms look for responsible workers who plan to stay with the firm for a long time, while youth often have shorter-term goals (for example, traveling or moving out of their parents’ house). In addition, youth are interested in training in new lines of work (for example, tattoo artistry instead of plumbing) that better fit their lifestyles.
- The quality of training programs goes beyond employability or labor market insertion. Programs also look to improve the social integration of vulnerable populations. Existing incentives for training providers in Chile place too much emphasis on attendance and employment outcomes after three months. A broader dialogue on how to measure the success of training programs, as well as longer-term policies, is needed.

- In order to increase participation and reduce dropout, programs need to focus more on targeting, selection, and an initial diagnosis of participant needs. Not all training programs are appropriate for all youth. Programs must invest in mentoring youth and helping them design their “life trajectory” so that they can make informed decisions about job training that fit their interests, strengths, and labor market demands.

## Colombia

**Date:** May 3, 2017

**Location:** Bogotá, Colombia

**Participating organizations:** National Service for Learning (Servicio Nacional de Aprendizaje, SENA), Public Employment Service (Servicio Público de Empleo), Fundación Corona, Ministry of Labor (Ministerio de Trabajo), Department of Social Prosperity (Departamento de Prosperidad Social), Volunteers Colombia, National Planning Department (Departamento Nacional de Planeación), National Association of Entities for Work and Human Development (Asociación Nacional de Entidades de Educación para el Trabajo y el Desarrollo Humano, ASENOF)

**Additional interviews:** Central Bank of Colombia (Banco de la República), Instiglio, CoSchool, Ministry of Education (Ministerio de Educación), Innpulsa

### Main discussion topics:

- Skills gap
- Quality of training programs
- Take-up and dropout in training programs

### Key takeaways:

- Colombia already has “sectoral working groups” (*mesas sectoriales*) that serve as a mechanism to link training programs with the skills demanded by employers. SENA, private training institutions, and private sector representatives all participate in these discussions. However, there is a lack of incentives for companies to participate in the working groups and some regions of the country do not have a working group that covers their needs.
- There is a need for more accompaniment and orientation for employers. Many employers discriminate against youth in their hiring processes. They lack knowledge about different training programs and the skills they provide graduates (for example, the difference between a *técnico* and *tecnólogo*). There are generally few youth who fit the profile of worker that employers are looking for – someone who plans to stay in the position for many years.
- Youth lack soft skills. Employers can teach specific technical skills, but they are looking for workers who are honest, know how to work in teams, and have good communication skills.

The most vulnerable groups of youth may require psycho-social support to build these skills.

- There is a lack of vocational orientation. Students do not know the value of finishing secondary school (leading to high dropout rates). Furthermore, they do not know what different job training programs can offer them or what their own strengths are. It is important to start discussing potential career paths in primary education.
- Many companies have very weak human resources processes. They are not good at identifying what skills and qualifications are necessary for different positions, which makes it even more difficult for youth to determine what type of training they need to obtain.
- The quality of instructors is an important determinant of the quality of training programs. For example, there are many English teachers who do not speak English well. To attract more qualified people to the profession, instructors need to be paid better salaries (for instance, many instructors are hired as contractors with little job security).
- The country's regions have vastly different needs. Policies that are made in Bogotá are often not appropriate for rural areas, so there should be a regional/territorial approach to these policies. Some regions lack economic opportunities, which makes it difficult to offer training in skills demanded in that region, but there is still space to improve the relevance of training options.
- High dropout rates are the result of various external factors. Many participants are single mothers who have limited childcare options and often need to find a job right away (rather than after receiving training). Some participants are not able to afford fares to reach the locations where training courses are held. Additionally, courses are generally open to all eligible applicants, and there is little effort to make sure that participants are a good match for the particular training program.
- There is a lack of information that is a problem for policymakers as well as youth. Policymakers and program implementers do not know about programs that are similar to (and potentially competing with) their own and do not have good monitoring systems. Youth lack information about what programs are offered and their quality. There is a need to improve data collection and to find effective ways to share this information with the general public.

## Dominican Republic

**Date:** April 26, 2017

**Location:** Santo Domingo, Dominican Republic

**Participating organizations:** Entrena, Vice Presidency's Cabinet for Social Policies (Gabinete de Políticas Sociales de la Vicepresidencia), USAID, Corporate Initiative for Technical Education (Iniciativa Empresarial para la Educación Técnica, IEET), Ministry of the Presidency (Ministerio de la Presidencia), Ministry of Economy, Planning, and Development (Ministerio de Economía

Planificación y Desarrollo, MEPyD), National Institute of Technical-Professional Training (Instituto Nacional de Formación Técnico Profesional, INFOTEP), Ministry of Education (Ministerio de Educación), NEO-RD, National Frameworks for Qualifications (Marcos Nacionales de Cualificaciones)

### **Main discussion topics:**

- Informality and job quality
- Quality of training programs
- Take-up and dropout in training programs

### **Key takeaways:**

- If training programs do not provide skills that are valued in the labor market, these programs are essentially preparing participants for informal work. The mismatch between skills taught in training programs and those demanded by employers contributes to informality, and there is a need for better data on labor demand to offer more relevant training.
- The informal sector is an important part of the economy (40%). For many women, informal work gives them greater autonomy and flexibility, which allows them to also manage domestic responsibilities.
- There is no agreed-upon definition for “high-quality training.” The definition should focus on results, not just inputs, and include factors beyond employability (for example, general well-being).
- Program implementers as well as youth lack information about the quality of training programs. There is a need to collect better data and share this information with youth so that they can make informed decisions. In other settings, information provision has proven to be a very cost-effective way to improve decisions (for example, in reducing high school dropout).
- In addition to technical skills, it is important to develop the soft skills necessary to function in a professional workplace.
- Economic factors contribute to high rates of program dropout. Many participants cannot afford to pay for transportation to training centers. As a result, programs that offer stipends or pay a minimum wage have much lower dropout rates.
- In order to participate in training programs, participants must have basic skills (such as the ability to read and write), which many NEET youth do not have.
- Another factor that affects take-up and dropout, specific to the Dominican context, is the large number of youth who lack identity documents. In the Dominican Republic, a mother must have identity documents to register her children, and as a result, many children (Dominicans as well as immigrants) are never registered. Without official identity

documents, youth are generally barred from receiving government services, including training programs.

## El Salvador

**Date:** May 15, 2017

**Location:** San Salvador, El Salvador

**Participating organizations:** Salvadoran Institute for Professional Formation (Instituto Salvadoreño de Formación Profesional, INSAFORP), Salvadoran Foundation for Economic and Social Development (Fundación Salvadoreña para el Desarrollo Económico y Social, FUSADES), Integral Salvadoran Education Foundation (Fundación para la Educación Integral Salvadoreña, FEDISAL), Glasswing International, Central American Technological Institute (Escuela Especializada en Ingeniería ITCA-FEPADE), Supérate Organization, Plan International, NEO El Salvador Alliance (Alianza NEO El Salvador)

### **Main discussion topics:**

- Informality and job quality
- Take-up and dropout in training programs
- Quality of training programs

### **Key takeaways:**

- El Salvador has had poor economic growth, therefore there is a significant lack of new jobs.
- Rather than informality leading into formality, in El Salvador, the opposite occurs: many youth employed in the formal sector transition into the informal sector because of lack of jobs. Some programs in El Salvador promote self-employment and entrepreneurship, even when it is informal. This may be the only way out of unemployment, since a large proportion of the population has not completed high school, which is required for many formal positions.
- The problem of informality is more severe for women, as many of them are expelled from the formal system around the age of 35 when they become mothers. As a result, it is important to design programs that consider the needs of their target population (e.g. having childcare services for women).
- Training must not only be focused on introducing youth to employment but also on updating their skills once they are employed.
- Territoriality, established by gangs, is one of the biggest problems in El Salvador. Youth lack mobility since they cannot work outside of the area where they live. Work in industrial parks (in some case in the form of corporate social responsibility initiatives) can help with the territoriality problem.

- Public institutions do not have the capacity to protect youth in training programs from violence. Violence is one of the main reasons of dropout from training programs.
- Youth from certain communities are stigmatized and viewed as potential gang members, which hurts their job prospects.
- Because of poverty and poor mobility, training programs should include subsidies for food and transport.
- Many youth have interests that are poorly aligned with the job market, so there is a need for information campaigns to inform youth about what skills and positions are in demand.
- Companies require exaggerated levels of experience for so-called entry-level positions. Therefore, interventions with internships or on-the-job training might be helpful. Furthermore, a promising area of study is to look at first job accompaniment for graduates of good quality programs.
- There is a lack of administrative data that could help to better target and identify populations with a greater potential to benefit from training.
- It is important to introduce a system of professional certifications.

## Mexico

**Date:** March 29, 2017

**Location:** Mexico City, Mexico

**Participating organizations:** McKinsey, Prospera, C230 Consultants, Youth International, Laboratoria, National School of Professional-Technical Education (Colegio Nacional de Educación Profesional Técnica, CONALEP)

### **Main discussion topics:**

- Informality and job quality
- Skills gap
- Quality of training programs

### **Key takeaways:**

- There should be different conceptualization of the NEET population. The term NEET has stigmatized youth as a lazy population. Some organizations have renamed this population as a population without opportunities for education or employment (SINSE in Spanish).
- There is a very close link between informality and illegality. Therefore, training programs should also focus on crime prevention. Programs should also consider that for some, informality has become a culture, a way of living.
- A large percentage of the young population holds informal jobs because they do not know the long-term benefits of being in the formal sector. Therefore, an area of opportunity for



programs is to give information to youth to modify their time preferences (present-biased, discounting the future).

- It is necessary to provide information on the benefits of training to youth, but also to provide employers with information about the benefits of hiring a well-trained youth. This is a way to include the private sector.
- It is very important to include the private sector in training design and implementation. A way to do this is through corporate social responsibility initiatives. When large corporations are interested in training youth, it becomes easier to offer and scale high-quality programs. However, the “brain drain” has discouraged some industries from offering training.
- Training for employment is necessary, but it is also necessary to introduce continuous training once youth are employed.
- There is a need for better coordination between the various youth employment programs and institutions that exist in Mexico.
- Soft skills are fundamental for high-quality training. However, there is no ideal training program. To ensure good quality it is necessary to have a good understanding of the target population.
- Focusing on the right population and on the right sector is fundamental. Working with a specific population (e.g. women) and a specific sector (e.g. digital) allows a better design of the methodology used for the training. Duration of trainings, internships, or on-the-job practices also depend on the target population and sector.
- Having contact with employers about the performance of training students can help them to be more effective in their hiring.
- It is important to introduce a system of professional certifications.