

Investing in Early Learning: A Long-Term Pathway from Education to Employment

Beatriz Cardoso
Executive Director of *Laboratório de Educação*

In the study “Road work: Creating a better highway from education to employment”, Mourshed et al. seek to explain the causes behind the mismatch between youth education and the job market, in light of the critical shortfall of high- and middle-skilled workers and of the striking youth unemployment rates experienced around the globe in recent years.¹

Turning their attention to the supply side of the labor equation, the authors examine the mechanisms by which skill development in education-to-employment programs has an effect on the observed youth employment outcomes. The difficulty, according to their findings, is that the majority of education and training opportunities lack input from multiple stakeholders in defining both focus and content. In other words, there is an information gap between the parties involved regarding their interdependent expectations. As pointed out in the research report “no one has a bird's-eye view of the whole process” and, in turn, millions of young people are unable to find quality jobs while employers struggle to fill in the jobs that exist (Mourshed et al. 5).

In countries like Brazil, otherwise praised for its fast-growing economy, 52% of the 303 surveyed employers claimed that they could *not* find enough skilled entry-level workers (Mourshed et al. 3). As an emerging market, soon-to-become one of the world’s leading powers, the persistence of this scenario constitutes a threat to the economic and social wellbeing of its citizens. Particularly when it comes to the aspects identified as key to closing the information gap, Brazil faces serious challenges. Mourshed et al. reveal that “soft skills” – personal characteristics such as punctuality, temperament and work ethic – are highly valued by employers worldwide and thus become crucial to succeed in the search for a job (17). Yet, soft skills are not only difficult to define and measure, as the authors rightly indicate. They are also not built overnight; not even in the course of two or three years. If we are looking for a long-term solution, it is important to adopt a more comprehensive approach that takes into consideration the educational chain as a longitudinal process.

Although education-to-employment and training should be a priority for policy-makers to improve current performance, the need to invest in building longstanding capacities cannot be overlooked. We must focus on the educational process holistically instead of limiting the scope of our actions to partial solutions that may work in the moment, yet do not address the structural factors that produce the informational gap in the first place.

Solely focusing on the Brazilian context, the problem of skill development among youth can be said to be rooted in the insufficient access to early childhood education and in the low-quality of primary schools, which are often unable to create productive learning scenarios for the children who enroll in them. Studies of multidisciplinary nature, led by both American and Brazilian researchers, have provided evidence to support this

¹ According to the authors, young people worldwide are three times more likely than their parents to be out of work. This is consistent with data from the International Labor Organization (ILO), which estimates that, globally, 75 million young people are currently unemployed (Mourshed et al. 2013, p. 3).

statement.

In 2007, for instance, research by Nobel Prize Laureate and Economist James Heckman demonstrated that investing in young children from disadvantaged environments early in their lives does not only reduce inequality but also yields high economic returns for individuals and societies at large – especially, if evaluated relative to later interventions. Heckman claims that the dynamic nature of skill formation makes “remediating the effects of early disadvantages at later ages [...] prohibitively costly” because, in the same way that advantages accumulate “so do disadvantages” (447). Psychologists have shown that significant disparities in vocabulary and language processing efficiency between infants from lower and higher socioeconomic status become evident as early as when they are 18 months old. By age 2, there is already a six-month gap in their cognitive development (Fernald 241-243). This does not mean that post-school on-the-job-training programs are unnecessary or even wasteful; however, their return rates would increase as a result of productivity if accompanied by early childhood interventions (Heckman 477).

In Brazil, a country where 95.7% of children between ages seven to fourteen had access to school as early as 1999, and more than 97% in 2006 (Amorim 274; INEP 94), only 74.8% of four- and five-year-olds attended a nursery or a pre-school in 2009. This proportion was even lower when controlling for the educational attainment of their mothers (Ministério da Educação 6).² Across all municipal school districts in 2004, there were an average of 12.4 pre-schools (public or private) for every 1,000 children in this age group. However, 25% of them had fewer than six facilities for every 1,000 children, and only 5% had more than 30. The availability of educational experts was no different, with only 28.5 teachers for every 1,000 children enrolled in pre-school education (Souza 231).

The reality is that, despite spending close to 5% of its GDP on education, comparably to the OECD’s average, the Brazilian government allocates most of its resources to funding post-secondary schools and universities. In 2005, 120% of the country’s per capita GDP was spent on each higher education student, but only 10% on each preschooler. OECD member states do not spend more than 40% of their per capita GDP on the former population, and meanwhile, countries like Mexico and Chile devote at least 20% of theirs to the latter (Souza 235).

Some progress in terms of access was achieved in 2001, when the National Education Plan expanded compulsory schooling to six-year olds, thereby adding one grade to elementary education (known as *ensino fundamental*). By 2005, 96.6% of all students ages six to fourteen were enrolled in the new nine-year track, and this number climbed to 97.6% in 2009 (Ministério da Educação 7). Despite the near universalization of attendance, quality remains a challenge for the public school system in Brazil, where the effects of disadvantaged circumstances prior to enrollment in formal schooling continues to negatively impact children’s learning outcomes.

Our public education system is not yet equipped to guarantee the necessary conditions so that every child who initially enrolls in school can succeed in it. In 2006, for instance, of all students ages seven to fourteen, only 93.8% had started the *ensino fundamental* track, which means that roughly 6% of them had been retained in pre-school.

² Only 60% of four- to six-year-old children whose mothers did not receive *any* formal education had access to a nursery and/or pre-school, compared to 90% of children whose mothers had completed post-secondary education (Souza 234).

This trend is consistent with the fact that, in the same year, 16% of *ensino fundamental* students were older than fourteen (INEP 95). Despite improvements, grade-retention rates continue to be high in the compulsory schooling period. Between 2000 and 2003, they decreased from 21.7% to 19.2%, rising again to 20.1% in 2005. Although age-grade distortion consistently fell from 41.7% in 2000 to 27.7% in 2007, the reality is still alarming: one in four students is left behind. On average, it took them more than ten years to conclude an eight-year long program. Dropout rates therefore increased from 4.9% in 2000 to 6.9% in 2005, resulting in a conclusion rate as low as 53.5% (INEP 105-108).

Not surprisingly, high school enrollment is far from ideal. Notwithstanding the fact that gross enrollment rates doubled from 1994 to 2000, they grew only 5.6% from 2001 to 2006 and, by 2007, there were net losses of more than 500,000 students per year, half of whom had repeated at least one grade (INEP 167-168). Data from the Basic Education Assessment (SAEB) showed in 2003 that only 6.9% of third-year high school students demonstrated an “adequate” performance level in the Math portion of the national test, and 6.2% in Portuguese. Moreover, in the 2007 National High School Exam (ENEM), the average writing score was 56 out of 100, while the score on the “objective” portion of the test (combining Natural and Social Sciences, Language and Literature, and Math) was 49 out of 100 (INEP 182). Grade-retention rates, as a result, followed the same pattern as in elementary school: they increased from 18.6% in 2000 to 22.6% in 2005. Dropout rates also rose from 8.05% to 10.0% in the same period. In 2005, it took an average of 3.8 years for students to finish the three-year program (INEP 184).

The answer to why we should invest in education as a holistic process is therefore clear. If nearly 60% of third-graders cannot perform simple arithmetic operations (add and subtract) and only 53% have basic reading and writing skills, what should we expect from their end once they reach high school?³ Difficulties in language learning can be detrimental for children’s later mathematical and logical development, given that literacy serves as a tool to access other areas of knowledge that ultimately become crucial for people’s professional attainment (Araújo 3). In Brazil, it is not only young people who are being left behind; children, since their early years, are also getting lost along the way. However, this *is* the right time to invest in the development of their future skills.

What is left for us to do? How early is enough to make a difference? Brazilian researchers from *Fundação Getúlio Vargas* estimated that, on average, any fifth-grade student who received pre-school education as a toddler has a 0.47 standard deviation increase in mathematical proficiency as shown by the Basic Education Assessment (SAEB), as well as a 1.2 year reduction in age-grade distortion (Souza 239-240). Studies have demonstrated that human capital development throughout one’s life depends on early investments made on certain abilities. Many cognitive and non-cognitive skills that are acquired during early childhood have lasting benefits on people’s learning abilities until adulthood (Souza 233). Not only can pre-school education stimulate important habits such as discipline, attention, and curiosity among children, but it can lead to a stronger capacity to assimilate knowledge in different content areas, thus contributing to more regular grade progression patterns in school, in addition to preparing them for a life-long learning journey

³ According to the *Prova ABC*, a national examination conducted in 2011 by the non-governmental organization *Todos pela Educação* and the National Institute for Educational Research (INEP), 56.1% of students enrolled in the third grade had achieved the expected level of reading proficiency, 53% demonstrated basic writing skills and only 42.8% exhibited an adequate level of mathematical skills (Mandelli).

(Souza 236).

Perhaps it is not *just* the fact that education-to-employment programs lack the “depth, breadth, and scale” to create different and better structures (Mourshed et al. 26). Regardless of the career path youth choose to follow, within academic tracks or vocational occupations, their early cognitive development will allow them to enter the job market with the most important of abilities: the ability to learn. If formative processes are consistent and strong since their crucial early childhood years, the results will undoubtedly show: “schools will be more effective [and] firms will have better workers to employ and train. At lower cost to society, bolstered families will produce better-educated students, more trained workers, and better citizens” (Heckman 448). Only when change takes place in a systemic and sustainable way will our youth no longer be left behind.

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