

The background of the entire page is a dense, repeating pattern of stylized, abstract line art. Each line drawing represents a human face, rendered in a minimalist, sketchy style. The faces are oriented in various directions, some looking forward, some in profile, and some with eyes closed. The lines are a uniform purple color. The overall effect is a sense of a large, diverse crowd of people. The pattern is consistent across the top and middle sections of the page, with a solid blue wave-like shape at the bottom.

Education and Skills: *Social Mobility and Social Inequality in Latin America and the Caribbean*

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Foreword

Latin America faces deep challenges related to social mobility and inequality, much of which is driven by gaps in education and skills. Both the Programme for International Student Assessment (PISA) and the Survey of Adults Skills (PIAAC) provide essential data on these disparities. PISA results highlight the need to improve education quality for younger generations, while PIAAC underscores the skills deficiencies among adults, hindering economic and social progress.

The insights offered by these assessments are crucial for understanding how skills development - or lack thereof - affects social mobility across the region. Education, in particular, remains a critical factor for lifting individuals and families out of poverty and enabling social inclusion. However, persistent gaps in the quality of education across different socioeconomic groups exacerbate inequality, limiting opportunities for upward mobility.

Latin American and Caribbean countries have seen remarkable progress in expanding access to education, but the region still struggles with a significant skills gap. Young people, particularly those from disadvantaged backgrounds, face barriers in acquiring the foundational and higher-level skills needed for the modern labour market. Without the right policies and practices, these inequities are likely to persist, trapping large segments of the population in cycles of poverty and exclusion.

This publication is designed to serve as a foundation for discussions at the Latin America and the Caribbean (LAC) Social Inclusion Ministerial in Bogotá, on October 22, 2024. It aims to help policymakers understand the magnitude of the region's skills challenges and encourage the adoption of strategies to foster inclusive growth through education reform and skills development. By addressing both the immediate and long-term needs for high-quality education and skills formation, governments can take meaningful steps toward reducing inequality and improving social mobility in Latin America and the Caribbean.

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Executive Summary

Latin America and the Caribbean (LAC) is a region of enormous contrasts, where wealth and prosperity coexist with pockets of extreme poverty and vulnerability. LAC countries have lifted millions out of poverty in recent decades, but progress towards combating inequality has been less successful. In the two decades running up to the COVID-19 pandemic, most countries in the region made significant progress in reducing income inequality. However, these modest gains have fallen short in addressing the region's vast inequality challenges, and progress has stalled in recent years. As a result, LAC still remains one of the most unequal regions in the world by international comparisons.

Economic inequality frequently acts as a catalyst for social disparities, as income gaps impede access to essential resources and services. Consistent with this, inequality in LAC is characterised by the lack of social and economic cohesion among population groups. Additionally, the LAC region not only has the world's highest levels of income inequality, but also provides very unequal opportunities to move up the social ladder. Households in the middle of the income distribution in Latin America and the Caribbean have limited access to educational services, both in terms of quantity and quality, compared to their middle-income counterparts in OECD countries and affluent households within the region. These limited opportunities for access to quality education, based on socio-economic background, perpetuate existing inequalities in the region, hindering individuals from achieving social mobility - whether by improving their socio-economic status within their own lifetime (intra-generational) or in comparison to their parents (intergenerational). Consequently, many individuals from low socio-economic backgrounds are unable to acquire the necessary skills to successfully integrate into the workforce.

Although educational attainment has improved considerably in Latin America and the Caribbean, particularly at primary level where coverage is almost universal (97.1%, similar to that of 98.9% for OECD member countries), significant challenges in access still persist at secondary and tertiary levels. Education completion rates and academic achievement levels remain low for children in LAC countries, especially those from lower socio-economic backgrounds.

School dropout is a major issue in the region, disproportionately affecting students nearing the end of their schooling and those at the lower end of the income distribution. On average, 35% of young people between 21 and 23 years old have not completed secondary school. Additionally, in Latin America and the Caribbean, the gross tertiary completion rate is only 25.1%, placing the region well below the OECD average (40%), and below the global average (30.8%). The region's low completion rates at this level contribute to a general shortage of high-skilled workers, which hampers enterprises and overall productivity. On an individual level, this leads to a significant income disparity between those with and without tertiary education, restricting the latter group to lower-quality and lower-paying jobs.

Beyond educational attainment, the region's youth also have low levels of foundational learning as measure by the Programme for International Student Assessment (PISA). In reading and science, more than half of the region's 15-year-olds do not meet the minimum level of competencies, and this worsens for mathematics, where the percentage rises to 75% (PISA 2022). Furthermore, PISA highlights significant socio-economic disparities within countries in Latin America and the Caribbean, exceeding the OECD

average. Despite these disparities and their impact on performance, the average scores of socio-economically advantaged students in the region remain below those in the OECD, and even fall short compared to socio-economically disadvantaged students in OECD countries. These findings may reflect a broader issue of insufficient quality in the region's education system, undermining its potential to drive productivity and social mobility.

Poor educational attainment and learning outcomes frequently result in significant challenges and disadvantages for individuals as they transition into adulthood, impacting their opportunities, job prospects, and socio-economic status. The OECD's Survey of Adult Skills (PIAAC) evaluates individuals' proficiency in literacy, numeracy, and problem-solving in digital environments, to assess their capabilities beyond formal education and their readiness for the workforce and societal participation. In its first cycle, the survey included Chile, Ecuador, Mexico, and Peru, revealing several important trends for the region. A higher percentage of adults in these countries scored at the lowest performance levels compared to the OECD average, demonstrating the need to improve student competencies in the educational system to perform adequately in adult life.

Additionally, in Latin America, the level of skills is more closely related to the quality of jobs people have rather than the number of jobs available. This underscores the intergenerational transmission of educational and socio-economic status, where socially advantaged individuals are more likely to attain higher education, gain better skills, and secure superior jobs. In contrast, those with lower educational attainment and skills often face low-quality, informal sector jobs, affecting two-thirds of households in the region. This situation increases their risk of poverty and income shocks, hindering their ability to advance educationally and improve their socio-economic status.

To address these issues, the region could increase its investment in education, as all the countries assessed have cumulative spending levels below \$75,000 - the threshold where higher PISA performance correlates with increased spending. Additionally, some countries at similar spending levels significantly outperform Latin America and the Caribbean, suggesting that reallocating existing educational resources could also be beneficial.

A high-quality education system that nurtures and promotes skills and a highly adaptable workforce is pivotal for Latin America and the Caribbean's inclusive growth and development. Currently, the region's workers and students underperform in terms of skills and proficiency when compared to OECD countries, limiting its potential growth. In this regard, other countries' experiences, such as Korea and Singapore, become extremely relevant. In the second half of last century, these countries' governments invested heavily in education, promoting inclusive growth by equipping younger generations with the necessary skills to enhance their socio-economic status and, at the aggregate level, transform their economies.

In summary, as both PISA and PIAAC reveal that Latin America and the Caribbean's education systems are not successfully providing the necessary skills for today's fast paced economy, policies and practices that transform the current education landscape are required. To be effective in increasing upward social mobility, education policies must build equity considerations into their design from the outset. To adapt the current and future workforce, it is crucial to increase and improve spending on high-quality, accessible education for all socio-economic backgrounds. This approach will help boost productivity, expand the pool of skilled workers, alleviate constraints on enterprises, transform the economy, and achieve inclusive growth.

1 Introduction

This chapter provides an overview of Latin America and the Caribbean's progress in reducing poverty and the ongoing challenges in addressing inequality over the past few decades. It establishes the critical link between inequality, social mobility, and educational attainment. Despite significant strides in educational attainment, particularly at the primary level, the region still faces persistent barriers at secondary and tertiary levels. Increased and better-targeted investment in education is essential to overcome these challenges. Such investment would enhance educational opportunities across all socio-economic backgrounds, improve skill levels, and address the productivity lag relative to other emerging economies with similar educational expenditures. Effective policies must focus not only on increasing funding, but also on ensuring equitable access, improving quality, and supporting disadvantaged students to break the cycle of poverty and foster inclusive growth.

Over the last couple of decades, Latin America and the Caribbean (LAC) experienced an overall improvement of national income, with the proportion of people living in absolute poverty dropping from 1 in 3 to 1 in 5 (OECD, 2021^[1]). Income inequality, another longstanding challenge in the region, also saw substantial improvements over the last 20 years, particularly in the first decade of the century (OECD, 2024^[2]) (Germán Feierherd, 2023^[3]). However, despite this progress, LAC remains the most unequal region in the world - as of 2024, the top 10% of earners in Latin America and the Caribbean made 12 times more than the poorest 10%, whereas in OECD countries, the income gap is much smaller, with the top 10% earning only 4 times more than the bottom 10% (Inter-American Development Bank, 2024^[4]).

Unsurprisingly, the three most unequal countries within OECD economies are all in Latin America: Chile, Costa Rica, and Mexico (OECD, 2024^[5]).

Inequality has not followed a consistent trend in Latin America and the Caribbean. In most Latin American and Caribbean (LAC) countries, inequality surged rapidly in the 1970s, peaked in the 1990s, and then began to decline gradually. While inequality today is lower than it was three decades ago, progress has stalled since 2012 (Inter-American Development Bank, 2024^[4]). Indicators of income inequality calculated using available national household surveys also suggest that the progress in the last two decades, occurred mostly between 2000 and 2012. Since then, progress has stagnated, with only minimal improvements observed between 2012 and 2018 (UNDP, 2021^[6]). The average Gini Index - a measure of inequality - fell from 52.8 to 47.0 between 2002 and 2012, with an average reduction of 0.58 points per year. However, between 2012 and 2018, the average Gini Index fell by less than one point. There is also variation in inequality trends across LAC countries; the slowdown in inequality reduction after 2012 is most pronounced in the extended Southern Cone (Argentina, Brazil, Chile, Paraguay, and Uruguay) and less marked in the Andean countries and Central America (UNDP, 2021^[6]). Most recently, following the COVID-19 pandemic, high inflation in LAC countries deteriorated real income levels and exacerbated income inequality (OECD, 2024^[2]) (Busso and Messina, 2020^[7]). As of 2021, Brazil, Colombia and Panama exhibit the highest inequality levels in the region (OECD, 2024^[2]).

Central to the issue of inequality is the region's limited intragenerational social mobility - defined as the changes in a person's socio-economic status during their lifetime - and the intergenerational transmission of educational and socioeconomic status. This hampers individuals' ability to enhance their socio-economic standing compared to their parents, a phenomenon known as intergenerational mobility (Brunori, Ferreira and Neidhöfer, 2023^[8]). Research indicates that between 44 percent (in Argentina) and 63 percent (in Guatemala) of current income inequality can be attributed to "inherited" factors (Brunori, Ferreira and Neidhöfer, 2023^[8]).

Societies with low social mobility often also show high levels of inequality. A study conducted by the Development Bank of Latin America (CAF) highlights that persistent low social mobility in the region is closely linked to the prevailing inequality. It significantly impacts individuals from various socio-economic backgrounds, adversely affecting their chances for human capital development, access to quality employment, and the ability to accumulate assets over their lifetime (CAF, 2022^[9]). This is also reflected in the region's lagging educational attainment and its workers' low skill levels (OECD, 2021^[10]). There are several ways this correlation can be interpreted. Solon's 2004 model suggests that the factors influencing intergenerational mobility - such as private returns to human capital, the progressivity of public investment in education, and transmissible factors like abilities, race, and social networks - also shape the long-term distribution of income. During the transition period, a reduction in income inequality (possibly due to changes in skill premiums or returns on education) or an increase in the progressivity of public spending on education could lead to higher social mobility (OECD, 2010^[11]).

Education has the potential to be a powerful driver of upward mobility, significantly influencing earnings, employment, overall wealth, and well-being. While it can help reduce societal inequalities, it can also perpetuate them, as educational attainment levels often carry over from one generation to the next. A

significant proportion of a child's educational attainment can be attributed to their parents' educational background, with parental education explaining more than 60% of the variation, even among younger generations (OECD, 2010^[11]).

Despite substantial progress in educational attainment in Latin America and the Caribbean over recent decades - particularly at primary level, where coverage is nearly universal - challenges remain at secondary and tertiary levels. On average, 35% of young people aged 21 to 23 have not completed secondary school, and the gross tertiary completion rate stands at only 25.1%, which is 15 percentage points below the OECD average of 40% and below the global average of 30.8% (Arias Ortiz et al., 2024^[12]).

The close link between educational attainment and employment outcomes perpetuates the cycle of poverty. Completing upper secondary education is generally regarded as the minimum level of education required for successful participation in the labour market for most individuals (OECD, 2021^[13]). Consequently, employment rates are significantly higher among adults aged 25-64 with upper secondary or post-secondary non-tertiary education compared to those with less education. On average, in OECD countries, only 59% of adults with below upper secondary education are employed, compared to 77% of those with upper secondary or post-secondary non-tertiary education. The employment rate is even higher for adults with tertiary education, reaching 87% (OECD, 2023^[14]).

Higher levels of educational attainment are generally related with greater skill levels and earnings as well. In OECD countries, adults aged 25-64 years with upper secondary or post-secondary non-tertiary education earn, on average, about 25% more annually than those without such qualifications (OECD, 2021^[13]). The earning premiums for completing a tertiary degree are substantially higher. On average, full-time workers with tertiary education earn nearly twice as much as those with below upper secondary education across OECD countries, but it can be over three times in Latin American countries, such as Brazil, Chile, and Colombia (OECD, 2023^[14]).

Additionally, unqualified and low-skilled workers are more likely to be employed in the informal sector. Globally, approximately 94% of individuals without formal education work in informal jobs, compared to 52% of those with secondary education and 24% of those with tertiary education. In advanced economies, the educational gap between the formal and informal sector, where workers are at a larger risk of poverty, is notably smaller (OECD, 2019^[15]).

It is also important to note that the benefits of lower inequality levels and increased social inclusion extend beyond the individual sphere. Highly educated and skilled individuals who earn higher incomes, will contribute more in taxes and incur lower costs for their country's government in terms of social welfare (OECD, 2023^[16]). Since the primary advantage of developed countries lies in their ability to maintain an educated and skilled workforce that adapts quickly to the advancements in manufacturing and production, high-quality formal education and skill training appear as viable means to promote development in LAC (Mercan, 2014^[17]).

During the 2000s, economic growth in Latin America and the Caribbean was accompanied by educational expansion benefiting children and youth from disadvantaged families at the lower educational levels. However, access at higher educational levels expanded more significantly for those with middle and high socioeconomic backgrounds, limiting education's role in promoting skills and social mobility (OECD, 2021^[10]).

Compared to LAC, regions such as East Asia have successfully increased general skill levels and social mobility, while reducing poverty and inequality through substantial investments in education between the 1960s and 1990s (Nancy Birdsall, 1995^[18]). Countries like Singapore and South Korea transformed their economies by prioritising education, enabling large segments of their populations to move out of poverty (McMahon, 1998^[19]).

The case of Korea is particularly interesting. In 1990, the country's GDP per capita was comparable to some Latin American countries, like Mexico. Since then, Korea has experienced impressive growth, diverging from LAC, due to policies and investments in education that have allowed for intergenerational social mobility similar to Northern European countries (OECD, 2019^[20]) (Mulakala, 2015^[21]). Despite the evidence that links education and inclusive economic growth, public expenditure on education is relatively low in the region, particularly when compared to OECD countries. In 2021, Latin American governments allocated an average of 3.8% of their nation's GDP to education, compared to 5% in OECD countries. This level of expenditure is more comparable to Western and Central Africa, which devoted 3.3% of their GDP to education that year (World Bank, 2021^[22]).

This is one of the main reasons why the LAC region still faces persistent barriers to social mobility, with wealth and opportunity often remaining within the same groups across generations. Addressing these issues will require comprehensive policy reforms aimed at breaking the cycle of poverty and ensuring that economic gains and opportunities are evenly distributed across the population's different socio-economic levels.

Investment in education behaves similarly as investment in physical capital, and LAC exhibits the highest returns (Patrinos, 2004^[23]). Higher educational levels are not only associated with higher wages and increased employment, but also with lower levels of informality. Increased and more efficient investment in education can help break the cycle of poverty for children living in these informal households, especially in the wake of the COVID-19 pandemic and the region's extended school closures, which were among the longest globally. The World Bank suggests that these disruptions could lead to a 12% reduction in lifetime earnings, highlighting the urgent need to address this issue from multiple perspectives (UNICEF, 2022^[24]).

While important, increasing public expenditure on education is only one part of the puzzle. If opportunities are unevenly distributed, public intervention in education can fail. Factors such as unequal access to educational services, significant differences in the quality of education between private and public schools, or constraints in access to finance can mean policies become regressive in their effect and act in practice to perpetuate inequality. As such, early childhood development (ECD) can be vital in boosting opportunities for the poor in developing countries. ECD is a precondition to ensure equal opportunities later on in life. Increased public spending on pre-school education and higher enrolment rates weaken the link between low levels of parental education and a child's secondary education performance (OECD, 2010^[11]). Narrowing the gap between public and private education can also help reduce current disparities in skills of the disadvantaged and the middle sectors with respect to the affluent. Higher returns to investments in education would reduce the drop-out rate and increase demand for education. Middle-sector parents, with much scope to increase education, would respond to such measures, especially at the secondary level. Better administration of schools, greater flexibility combined with more accountability, a modern system of evaluation and incentives for school administrators, can improve the return on current expenditures (OECD, 2010^[11]).

Promoting more equitable access to education will help foster inclusive growth. The right to education entails striving for high-quality, compulsory education that ensures equality and inclusion for all students (UNESCO, 2005^[25]). It is crucial to support students from disadvantaged backgrounds, often from low socio-economic status, to help them remain in education longer. Adults who complete tertiary education often have highly educated parents but those from families with lower levels of education should receive proper support so that they can achieve their full potential (OECD, 2017^[26]). Quality and equity in education are not mutually exclusive; the highest-performing countries in secondary education are those that distribute educational resources more equitably across socio-economic groups (OECD, 2013^[27]).

Improving skill levels and reducing inequalities in learning outcomes in the region could also aid in the productivity underperformance that the region has displayed over the last two decades, as Latin America and the Caribbean shows an important productivity gap relative to other emerging markets (IMF, 2024^[28]).

This lag is evident both in the OECD's Survey for Adult Skills (PIAAC) - which measures adult proficiency in key information-processing skills - and the Programme for International Student Assessment (PISA) - which measures 15-year-olds' performances in mathematics, reading and science. As will be discussed in Chapter 2, the first cycle of PIAAC revealed a considerable skill gap, despite improvements in educational attainment. Chapter 3 will address the region's performance in the 2022 PISA, which again shows underperformance relative to countries with similar income levels.

Ultimately, improved and strategically targeted investment in education is essential for fostering inclusive growth in the region. This approach must go beyond simply increasing funding; it should also address specific barriers and disparities. Effective investment can enhance educational attainment across all socio-economic backgrounds and elevate skill levels, directly tackling the productivity gap observed in Latin America and the Caribbean relative to other emerging economies with comparable educational expenditures. By implementing targeted measures alongside increased investment, the region can better address current inequalities and drive sustainable economic progress.

References

- Aleksynska, M. and A. Kolev (2021), “Education-occupation mismatch in the context of informality and development”, *OECD Development Centre Working Papers*, No. 346, OECD Publishing, Paris, <https://doi.org/10.1787/3291e65c-en>. [134]
- Archer, L. (2015), ““Science capital”: A conceptual, methodological, and empirical argument for extending bourdieusian notions of capital beyond the arts”, *Journal of Research in Science Teaching*, Vol. 52/7, pp. 922-948. [100]
- Arias Ortiz, E. et al. (2024), *El estado de la educación en América Latina y el Caribe 2023*, Banco Interamericano de Desarrollo, <https://doi.org/10.18235/0005515>. [65]
- Arias Ortiz, E. et al. (2024), *The State of Education in Latin America and the Caribbean 2023*, <https://publications.iadb.org/en/state-education-latin-america-and-caribbean-2023>. [12]
- Arnold, J. et al. (2024), “Towards better social protection for more workers in Latin America: Challenges and policy considerations”, *OECD Economics Department Working Papers*, No. 1804, OECD Publishing, Paris, <https://doi.org/10.1787/76a04c6f-en>. [35]
- Bourdieu, P. (1986), *The forms of capital*, pp. 241-258. [85]
- Broecke, S., G. Quintini and M. Vandeweyer (2017), “Explaining international differences in wage inequality: Skills matter”, *Economics of Education Review*, Vol. 60, pp. 112-124, <https://doi.org/10.1016/j.econedurev.2017.08.005>. [128]
- Brown, C., T. Hooley and T. Wond (2020), “Building career capital: developing business leaders’ career mobility”, *Career Development International*, Vol. 25/5, pp. 445-459, <https://doi.org/10.1108/CDI-07-2019-0186>. [86]
- Brunner, J. (2013), “The Rationale for Higher Education Investment in Ibero-America”, *OECD Development Centre Working Papers*, No. 319, OECD Publishing, Paris, <https://doi.org/10.1787/5k40d6717l8x-en>. [76]
- Brunori, P., F. Ferreira and G. Neidhöfer (2023), *Inequality of Opportunity and Intergenerational Persistence in Latin America*, <https://publications.iadb.org/en/inequality-opportunity-and-intergenerational-persistence-latin-america>. [8]
- Busso, M. and J. Messina (2020), *The Inequality Crisis: Latin America and the Caribbean at the Crossroads*, <https://publications.iadb.org/en/the-inequality-crisis-latin-america-and-the-caribbean-at-the-crossroads>. [7]
- CAF (2022), *Inherited inequalities: The role of skills, employment, and wealth*, <https://www.caf.com/media/4660888/red2022-re-eng.pdf>. [9]
- Chetty, R. (2022), “Social capital I: measurement and associations with economic mobility”, *Nature*, Vol. 608, pp. 108-121. [88]
- Covacevich, C. et al. (2021), “Indicators of teenage career readiness: An analysis of longitudinal data from eight countries”, *OECD Education Working Papers*, No. 258, OECD Publishing, Paris, <https://doi.org/10.1787/cec854f8-en>. [90]

- De La Mata, D. (2023), “The role of skills, employment, and wealth in the opportunities of new generations.” [33]
- Diemer, M. (2009), “Pathways to occupational attainment among poor youth of color: The role of sociopolitical development”, *The Counseling Psychologist*, Vol. 39, pp. 6-35. [111]
- ECLAC (2024), *Preventing and reducing school dropout in Latin America and the Caribbean*. [55]
- ECLAC (2023), *Panorama Regional en Educación*, https://www.cepal.org/sites/default/files/presentations/presentacion_d_trucco_cepal.pdf. [58]
- ECLAC, UNESCO and UNICEF (2022), *Education in Latin America and the Caribbean at a crossroads*. [56]
- ECLAC, UNESCO, UNICEF (2024), “Education in Latin America and the Caribbean at a Crossroads: Regional Monitoring Report SDG4—Education 2030”, *Comparative Education Review*, Vol. 68/2, pp. 312-314, <https://doi.org/10.1086/730227>. [66]
- Encinas-Martín, M. and M. Cherian (2023), *Gender, Education and Skills: The Persistence of Gender Gaps in Education and Skills*, OECD Skills Studies, OECD Publishing, Paris, <https://doi.org/10.1787/34680dd5-en>. [47]
- Ferranti, G. (2004), *Inequality in Latin America and the Caribbean: Breaking with History?*. [142]
- Friedman, S. and L. Laurison (2019), *The Class Ceiling: Why it pays to be privileged*, Policy Press. [84]
- Germán Feierherd, P. (2023), *The Pink Tide and Income Inequality in Latin America*, Cambridge University Press. [3]
- Granovetter, M. (1990), *Getting a job: a study of contacts and careers*, Harvard University Press. [97]
- Hanushek, E. et al. (2015), “Returns to skills around the world: Evidence from PIAAC”, *European Economic Review*, Vol. 73, pp. 103-130, <https://doi.org/10.1016/j.euroecorev.2014.10.006>. [127]
- Herdman, P. (2024), *Innovation in career pathways across five countries*, OECD Publishing. [108]
- Hout, M. and T. DiPrete (2006), “What we have learned: RC28’s contributions to knowledge about social stratification”, *Research in Social Stratification and Mobility*, Vol. 24/1, pp. 1-20, <https://doi.org/10.1016/j.rssm.2005.10.001>. [34]
- IDB (2024), www.iadb.org, <https://www.iadb.org/en/news/complexities-inequality-latin-america-and-caribbean#:~:text=March%2006%2C%202024,for%20developed%20countries%20in%20OECD>. [141]
- IDB (2023), *América Latina y el Caribe en PISA 2022: ¿Cómo le fue a la región?*, <https://publications.iadb.org/publications/spanish/viewer/America-Latina-y-el-Caribe-en-PISA-2022-omo-le-fue-a-la-region.pdf>. [137]
- IDB (2023), *América Latina y el Caribe en PISA 2022: ¿Cuántos tienen bajo desempeño?*, <https://publications.iadb.org/publications/spanish/viewer/America-Latina-y-el-Caribe-en-PISA-2022-cuantos-tienen-bajo-desempeno.pdf>. [138]

- ILO (2023), *2023 Labour Overview*. [48]
- ILO (2014), *Recent experiences of formalization in Latin America and the Caribbean*. [49]
- IMF (2024), *Regional Economic Outlook for the Western Hemisphere*, <https://www.imf.org/en/Publications/REO/WH/Issues/2024/04/19/regional-economic-outlook-western-hemisphere-april-2024#:~:text=The%20Western%20Hemisphere&text=Growth%20is%20now%20moderating%2C%20from,policies%20aimed%20at%20curbing%20inflation.> [28]
- IMF (2024), *Regional Economic Outlook for the Western Hemisphere*. [46]
- Inter-American Development Bank (2024), *The Complexities of Inequality in Latin America and the Caribbean*, <https://www.iadb.org/en/news/complexities-inequality-latin-america-and-caribbean>. [4]
- Jenkins, H. (2017), *Social Mobility and Economic Success*. [52]
- Jones, S., A. Mann and K. Morris (2016), “The ‘Employer Engagement Cycle’ in Secondary Education: analysing the testimonies of young British adults”, *Journal of Education and Work*, Vol. 29/7, pp. 834-856, <https://doi.org/10.1080/13639080.2015.1074665>. [101]
- Kashefpakdel, E. (2016), “Career education that works: an economic analysis using the British Cohort Study”, Vol. 30/3, pp. 217-234. [99]
- Kemple, J. (2008), *Career Academies: long-term impacts on labour market outcomes, educational attainment, and transitions to adulthood*, MDRC. [109]
- Kim, H. (2015), *Resetting Education Policy to Restore Social Mobility*. [51]
- Lafuente, E. (ed.) (2022), *¿Como reconstruir la educación postpandemia? Soluciones para cumplir con la promesa de un mejor futuro para la juventud*, Inter-American Development Bank, <https://doi.org/10.18235/0004241>. [143]
- Lee, Y. et al. (2021), “Equity in career development of high school students in South Korea: The role of school career education.”, *Education Sciences*, Vol. 11/1, p. 20, <https://doi.org/10.3390/educsci11010020>. [104]
- LeGallais, T. (2008), *The work experience placements of secondary school students: widening horizons or reproducing social inequality?*, Birmingham City University, https://www.educationandemployers.org/wp-content/uploads/2014/06/the_work_experience_placements_of_secondary_school_students.pdf. [103]
- Lyche, C. (2010), “Taking on the Completion Challenge: A Literature Review on Policies to Prevent Dropout and Early School Leaving”, *OECD Education Working Papers*, No. 53, OECD Publishing, Paris, <https://doi.org/10.1787/5km4m2t59cmr-en>. [68]
- Mann, A. (2024), *Teenage career development in England: A Review of PISA 2022 Data*. [94]
- Mann, A. (2021), *Career ready?: How schools can better prepare young people for working life in the era of COVID-19*, OECD Publishing, <https://doi.org/10.1787/e1503534-en>. [98]

- Mann, A. (2017), "Schools and the twenty-first century labour market: perspectives on structural change", *British Journal of Guidance and Counselling*, Vol. 45/2, pp. 208-218, <https://doi.org/10.1080/03069885.2016.1266440>. [89]
- Mann, A., C. Percy and E. Kashefpakdel (2018), *Socialised social capital: the capacity of schools to use careers provision to compensate for social capital deficiencies among teenagers*, Routledge, London. [106]
- McMahon, W. (1998), *Education and Growth in East Asia*. [19]
- Mercan, M. (2014), *The Effect of Education Expenditure on Economic Growth: The Case of Turkey*. [17]
- Mulakala, T. (2015), *Social Mobility: Experiences and Lessons from Asia*, KDI. [21]
- Nancy Birdsall, D. (1995), *Inequality and Growth Reconsidered: Lessons from East Asia*. [18]
- Neidhöfer, G., J. Serrano and L. Gasparini (2018), "Educational inequality and intergenerational mobility in Latin America: A new database", *Journal of Development Economics*, Vol. 134, pp. 329-349, <https://doi.org/10.1016/j.jdeveco.2018.05.016>. [43]
- New Brunswick Department of Education and Early Childhood Development (2023), *Career Education Framework in New Brunswick*, <https://www2.gnb.ca/content/dam/gnb/Departments/ed/pdf/K12/FRL/nb-career-education-framework.pdf>. [110]
- OECD (2024), *About PIAAC*, <https://www.oecd.org/en/about/programmes/piaac.html>. [40]
- OECD (2024), *Challenging Social Inequality Through Career Guidance: Insights from International Data and Practice*, OECD Publishing, Paris, <https://doi.org/10.1787/619667e2-en>. [83]
- OECD (2024), *Education at a Glance*, OECD Publishing. [69]
- OECD (2024), *Government at a Glance: Latin America and the Caribbean 2024*, https://www.oecd.org/en/publications/government-at-a-glance-latin-america-and-the-caribbean-2024_4abdba16-en.html. [2]
- OECD (2024), *Government at a Glance: Latin America and the Caribbean 2024*, OECD Publishing, Paris, <https://doi.org/10.1787/4abdba16-en>. [139]
- OECD (2024), *Income inequality indicator*, <https://www.oecd.org/en/data/indicators/income-inequality.html>. [5]
- OECD (2024), *OECD Economic Surveys: Mexico 2024*, OECD Publishing, Paris, <https://doi.org/10.1787/b8d974db-en>. [73]
- OECD (2023), *Review Education Policies - Education GPS*, <https://gpseducation.oecd.org/revieweducationpolicies/#!node=&filter=all>. [16]
- OECD (2023), *Building Future-Ready Vocational Education and Training Systems*, OECD Reviews of Vocational Education and Training, OECD Publishing, Paris, <https://doi.org/10.1787/28551a79-en>. [123]

- OECD (2023), "Career talks with guest speakers: A guide to delivering an effective career development activity", *OECD Education Policy Perspectives*, No. 69, OECD Publishing, Paris, <https://doi.org/10.1787/93594cb3-en>. [96]
- OECD (2023), *Education at a Glance 2023*, https://www.oecd-ilibrary.org/education/education-at-a-glance-2023_e13bef63-en. [14]
- OECD (2023), *Education at a Glance 2023: OECD Indicators*, OECD Publishing, Paris, <https://doi.org/10.1787/e13bef63-en>. [71]
- OECD (2023), *Main Findings from the 2022 OECD Risks that Matter Survey*, OECD Publishing, Paris, <https://doi.org/10.1787/70aea928-en>. [114]
- OECD (2023), *Multi-dimensional Review of El Salvador: Strategic Priorities for Robust, Inclusive and Sustainable Development*, OECD Development Pathways, OECD Publishing, Paris, <https://doi.org/10.1787/2f3d5e1f-en>. [64]
- OECD (2023), *OECD Skills Outlook 2023: Skills for a Resilient Green and Digital Transition*, OECD Publishing, Paris, <https://doi.org/10.1787/27452f29-en>. [115]
- OECD (2023), *PISA 2022 Results (Volume I): The State of Learning and Equity in Education*, <https://doi.org/10.1787/53f23881-en>. [57]
- OECD (2023), *PISA 2022 Results (Volume I): The State of Learning and Equity in Education*, PISA, OECD Publishing, Paris, <https://doi.org/10.1787/53f23881-en>. [116]
- OECD (2023), *PISA 2022: Resultados para América Latina y el Caribe*, https://www.cepal.org/sites/default/files/presentations/presentacion_d_salinas_ocde.pdf. [79]
- OECD (2023), *Skills in Latin America: Insights from the Survey of Adult Skills (PIAAC)*, OECD Skills Studies, OECD Publishing, Paris, <https://doi.org/10.1787/5ab893f0-en>. [30]
- OECD (2022), *Education at a Glance 2022: OECD Indicators*, OECD Publishing, Paris, <https://doi.org/10.1787/3197152b-en>. [72]
- OECD (2022), *Gender Equality in Peru: Towards a Better Sharing of Paid and Unpaid Work*, Gender Equality at Work, OECD Publishing, Paris, <https://doi.org/10.1787/e53901b5-en>. [63]
- OECD (2022), *Pathways to Professions: Understanding higher vocational and professional tertiary education systems*, <https://doi.org/10.1787/a81152f4-en>. [124]
- OECD (2022), *Skills for the Digital Transition: Assessing Recent Trends Using Big Data*, OECD Publishing, Paris, <https://doi.org/10.1787/38c36777-en>. [37]
- OECD (2021), *Education at a Glance 2021*, https://www.oecd-ilibrary.org/education/education-at-a-glance-2021_b35a14e5-en. [13]
- OECD (2021), *Education at a Glance 2021: OECD Indicators*, OECD Publishing, Paris, <https://doi.org/10.1787/b35a14e5-en>. [146]
- OECD (2021), *Experiencing the workplace: the importance and benefits for students*, OECD Publishing, <https://doi.org/10.1787/b679d759-en>. [95]

- OECD (2021), *Future-Ready Adult Learning in Latin America*, [10]
https://www.oecd.org/en/publications/future-ready-adult-learning-in-latin-america_18d2f2f1-en.html.
- OECD (2021), *Future-Ready Adult Learning in Latin America. Action Plan*. [44]
- OECD (2021), *How's Life in Latin America? : Measuring Well-being for Policy Making*, [1]
https://www.oecd-ilibrary.org/social-issues-migration-health/how-s-life-in-latin-america_2965f4fe-en.
- OECD (2021), *How's Life in Latin America?: Measuring Well-being for Policy Making*, OECD [54]
 Publishing, Paris, <https://doi.org/10.1787/2965f4fe-en>.
- OECD (2021), *OECD Skills Outlook 2021: Learning for Life*, OECD Publishing, [117]
<https://doi.org/10.1787/0ae365b4-en>.
- OECD (2021), *OECD Skills Outlook 2021: Learning for Life*, OECD Publishing, Paris, [29]
<https://doi.org/10.1787/0ae365b4-en>.
- OECD (2020), *Dream Jobs? Teenagers' Career Aspirations and the Future of Work*, [93]
<https://www.oecd.org/education/dream-jobs-teenagers-career-aspirations-and-the-future-of-work.htm>.
- OECD (2020), *Education at a Glance 2020: OECD Indicators*, OECD Publishing, Paris, [122]
<https://doi.org/10.1787/69096873-en>.
- OECD (2020), *OECD Employment Outlook 2020: Worker Security and the COVID-19 Crisis*, [121]
 OECD Publishing, Paris, <https://doi.org/10.1787/1686c758-en>.
- OECD (2019), *How are PISA results related*. [59]
- OECD (2019), *Getting Skills Right: Future-Ready Adult Learning Systems*, OECD Publishing, [125]
 Paris, <https://doi.org/10.1787/9789264311756-en>.
- OECD (2019), *PISA 2018 Assessment and Analytical Framework*, PISA, OECD Publishing, [77]
 Paris, <https://doi.org/10.1787/b25efab8-en>.
- OECD (2019), *PISA 2018 Assessment and Analytical Framework*, [78]
<https://doi.org/10.1787/b25efab8-en>.
- OECD (2019), *Skills Matter: Additional Results from the Survey of Adult Skills*, https://www.oecd-ilibrary.org/education/skills-matter_1f029d8f-en. [20]
- OECD (2019), *Skills Matter: Additional Results from the Survey of Adult Skills*, OECD Skills [39]
 Studies, OECD Publishing, Paris, <https://doi.org/10.1787/1f029d8f-en>.
- OECD (2019), *Survey of Adult Skills (PIAAC)*, [118]
<http://www.oecd.org/skills/piaac/publicdataandanalysis/>.
- OECD (2019), *Tackling Vulnerability in the Informal Economy*, https://www.oecd-ilibrary.org/development/tackling-vulnerability-in-the-informal-economy_939b7bcd-en. [15]
- OECD (2018), *A Broken Social Elevator? How to Promote Social Mobility*, OECD Publishing, [32]
 Paris, <https://doi.org/10.1787/9789264301085-en>.

- OECD (2018), *Equity in Education: Breaking Down Barriers to Social Mobility*, PISA, OECD Publishing, Paris, <https://doi.org/10.1787/9789264073234-en>. [42]
- OECD (2018), *Opportunities for All: A Framework for Policy Action on Inclusive Growth*, OECD Publishing, Paris, <https://doi.org/10.1787/9789264301665-en>. [61]
- OECD (2018), *PISA 2018 Results (Volume I): What Students Know and Can Do*, OECD Publishing, Paris, <https://doi.org/10.1787/19963777>. [147]
- OECD (2017), *OECD Economic Surveys: Argentina 2017: Multi-dimensional Economic Survey*, OECD Publishing, Paris, https://doi.org/10.1787/eco_surveys-arg-2017-en. [67]
- OECD (2017), *To what extent does parents' education influence their children's educational attainment?*, <https://www.oecd-ilibrary.org/docserver/eag-2017-10-en.pdf?expires=1728389065&id=id&accname=guest&checksum=C2C594C3AAF04FEC5984BE4E3002EE60>. [26]
- OECD (2016), *PISA 2015 Results (Volume I): Excellence and Equity in Education*, PISA, OECD Publishing, Paris, <https://doi.org/10.1787/9789264266490-en>. [81]
- OECD (2016), *Skills Matter: Further Results from the Survey of Adult Skills*, OECD Skills Studies, OECD Publishing, Paris, <https://doi.org/10.1787/9789264258051-en>. [41]
- OECD (2015), "Higher education in Latin America: Challenges and opportunities", in *E-Learning in Higher Education in Latin America*, OECD Publishing, Paris, <https://doi.org/10.1787/9789264209992-4-en>. [74]
- OECD (2015), *Survey of Adult Skills (PIAAC)*, <http://www.oecd.org/skills/piaac/publicdataandanalysis/>. [119]
- OECD (2013), *OECD Skills Outlook 2013: First Results from the Survey of Adult Skills*, OECD Publishing, Paris, <https://doi.org/10.1787/9789264204256-en>. [38]
- OECD (2013), *PISA 2012 Results: Excellence through Equity (Volume II)*, https://www.oecd-ilibrary.org/education/pisa-2012-results-excellence-through-equity-volume-ii_9789264201132-en. [27]
- OECD (2012), "Does Money Buy Strong Performance in PISA?", *PISA in Focus*, No. 13, OECD Publishing, Paris, <https://doi.org/10.1787/5k9fhmfzc4xx-en>. [82]
- OECD (2012), *OECD Survey of Adult Skills (PIAAC)*, <http://www.oecd.org/skills/piaac/publicdataandanalysis/>. [120]
- OECD (2010), *Education Policies for Upward Social Mobility in Latin America*, https://www.oecd.org/en/publications/2010/11/education-policies-for-upward-social-mobility-in-latin-america_g17a1f51.html. [126]
- OECD (2010), *Education, Social Mobility and the Middle Sectors*, https://www.oecd-ilibrary.org/development/latin-american-economic-outlook-2011/education-social-mobility-and-the-middle-sectors_leo-2011-9-en. [11]
- OECD (2010), *Latin America Economic Outlook 2011: How Middle Class is Latin America*, <http://dx.doi.org/leo-2011-en>. [144]

- OECD (2010), *Latin American Economic Outlook 2011: How Middle-Class Is Latin America?*, OECD Publishing, Paris, <https://doi.org/10.1787/leo-2011-en>. [75]
- OECD (2010), *The high cost of low education performance*. [60]
- OECD and ILO (2020), *Social Dialogue, Skills and COVID-19*. [133]
- OECD/CAF/ECLAC (2016), *Latin American Economic Outlook 2017: Youth, Skills and Entrepreneurship*, OECD Publishing, Paris, <https://doi.org/10.1787/leo-2017-en>. [145]
- OECD et al. (2023), *Latin American Economic Outlook 2023: Investing in Sustainable Development*, OECD Publishing, Paris, <https://doi.org/10.1787/8c93ff6e-en>. [140]
- OECD et al. (2019), *Latin American Economic Outlook 2019: Development in Transition*, OECD Publishing, Paris, <https://doi.org/10.1787/g2g9ff18-en>. [135]
- OECD et al. (2022), *Latin American Economic Outlook 2022: Towards a Green and Just Transition*, OECD Publishing, Paris, <https://doi.org/10.1787/3d5554fc-en>. [36]
- OECD, E. (2023), *Latin American Economic Outlook 2023. Investing in Sustainable Development*, <https://doi.org/10.1787/20725140>. [136]
- Oxera Consulting LLP (2020), *The impact of social mobility on productivity*, https://www.suttontrust.com/wp-content/uploads/2020/01/Oxera-report_WEB_FINAL.pdf. [131]
- Patrinos, G. (2004), *Returns to Investment in Education: A Further Update*. [23]
- Perry, B. (2016), “Misalignment of Career and Educational Aspirations in Middle School: Differences across Race, Ethnicity, and Socioeconomic Status”, *Social Sciences*, Vol. 5/3, <https://doi.org/10.3390/socsci5030035>. [92]
- Renée, L. (2023), *The Long-Term Effects of Career Guidance in High School: Evidence from a randomised experiment*, https://economie.esq.ugam.ca/wp-content/uploads/sites/54/2023/03/Guidance_LRenee_2023.pdf. [112]
- Resnjanskij, S. (2023), *Mentoring erhöht die Ausbildungsbeteiligung benachteiligter Jugendlicher*, <https://www.ifo.de/DocDL/sd-2023-12-ZDG-berufseinstieg-wachstumsfaktor.pdf>. [107]
- Salvanes, K. and A. Bjorklund (2010), “Education and Family Background: Mechanisms and Policies”, *SSRN Electronic Journal*, <https://doi.org/10.2139/ssrn.1620398>. [45]
- Sehnbruch, K., M. Apablaza and J. Foster (2024), “Poor-Quality Employment: Who Is Deprived in Our Labour Markets?”, *LSE Public Policy Review*, Vol. 3/2, <https://doi.org/10.31389/lsepr.104>. [31]
- Skovhus, R. (2016), “A focus on educational choice has social justice consequences – an empirical study informed by Sen’s capability approach.”, *Journal of the National Institute of Career Education and Counselling*, Vol. 36, pp. 54-60, <https://doi.org/10.20856/jnic>. [105]
- Social Research and Demonstration Corporation (2009), *Future to discover: interim impacts report*, https://srdc.org/wp-content/uploads/2022/07/FTD_IIR_report_ENG.pdf. [113]

- Staff, J. (2010), "Uncertainty in early occupational aspirations: role exploration or aimlessness?", *Social Forces*, Vol. 119, pp. 55-69, <https://doi.org/10.1353/sof.2010.0088>. [91]
- Stanley, J. and A. Mann (2014), *A theoretical framework for understanding employer engagement*, in Mann, A. et al. (eds), *Understanding employer engagement in education*, Routledge, London. [102]
- The Asia Foundation and Korea Development Institute (KDI) (2015), *Social Mobility: Experiences and Lessons from Asia*, The Asia Foundation. [129]
- Tomlinson, M. et al. (2022), "Developing graduate employability for a challenging labour market: the validation of the graduate capital scale", *Journal of Applied Research in Higher Education*, Vol. 14/3, pp. 1193-1209. [87]
- Torche, F. (2014), "Intergenerational Mobility and Inequality: The Latin American Case", *Annual Review of Sociology*, Vol. 40/1, pp. 619-642, <https://doi.org/10.1146/annurev-soc-071811-145521>. [53]
- UNDP (2021), *Trapped? Inequality and Economic Growth in Latin America and the Caribbean*, <https://www.undp.org/latin-america/publications/trapped-inequality-and-economic-growth-latin-america-and-caribbean>. [6]
- UNESCO (2024), *The urgency of educational recovery in Latin America and the Caribbean*. [62]
- UNESCO (2005), *Guidelines for inclusion: ensuring access to education for all*, <https://unesdoc.unesco.org/ark:/48223/pf0000140224>. [25]
- UNICEF (2022), *Two years after: Saving a generation*, <https://www.unicef.org/lac/en/reports/two-years-after-saving-a-generation>. [24]
- Valenzuela, J. (2022), *Trajectory and policies for inclusion in higher education in Latin America and the Caribbean in the context of the pandemic*. [70]
- Willms, J. (2006), "Variation in socioeconomic gradients among cantons in French- and Italian-speaking Switzerland: Findings from the OECD PISA", *Educational Research and Evaluation*, Vol. 12(2), pp. 129-154. [80]
- World Bank (2024), *World Bank Open Data*, <https://data.worldbank.org/> (accessed on June 2024). [130]
- World Bank (2021), *World Development Indicators*, <https://databank.worldbank.org/source/world-development-indicators>. [22]
- World Bank (2020), *World Bank Enterprise Survey*, <https://prosperitydata360.worldbank.org/> (accessed on June 2024). [132]
- World Economic Forum (2020), *The Global Social Mobility Report 2020: Equality, Opportunity and a New Economic Imperative*, World Economic Forum, https://www3.weforum.org/docs/Global_Social_Mobility_Report.pdf. [50]

2 Skills for sustainable growth and social mobility in Latin America and the Caribbean

This chapter examines the relationship between skill levels and social mobility, utilising data from the four Latin American countries that participated in the first cycle of the Survey of Adult Skills (PIAAC): Chile, Ecuador, Mexico, and Peru. The findings indicate that skill levels in the region are lower compared to other participating countries and are heavily influenced by socio-economic background. The data reveals improvements in skill levels associated with educational attainment; however, there is also a strong correlation between an individual's educational achievement and their parents' educational background in the region. These results, indicative of the intergenerational transmission of socio-economic status, are contrasted with the experiences of other countries that have improved their skill levels and promoted social mobility through investment in education.

Introduction

Latin America and the Caribbean's unique biodiversity and young and diverse population offer important growth opportunities. However, for these to be leveraged, the persisting challenges of poverty and inequality need to be addressed. A skilled workforce, capable of adapting quickly to a fast-changing world, is the cornerstone of a country's growth and development. Yet, fostering a skilled workforce requires strong education systems and training programs.

The challenge in Latin America and the Caribbean (LAC) is nuanced. Despite progress in terms of secondary education coverage, the region shows lagging tertiary attainment, as only a small share of adults attained at least short cycle higher education. As a result, skills and productivity levels are low in the LAC region compared to OECD countries and other emerging regions (OECD, 2021^[29]).

The general lack of skills across Latin American and Caribbean countries creates a mismatch between labour demand and supply, leading to high unemployment rates among individuals with low educational attainment or skill levels, contributing to significant inequalities in the region (OECD, 2023^[30]). Furthermore, those with low skill levels are more likely to work in the informal sector, a phenomenon that is highly prevalent in Latin America and the Caribbean. Informal jobs do not offer social protection to employees, adversely affecting their well-being and reducing their chances of improving their socio-economic status over their lifetime (Sehnbruch, Apablaza and Foster, 2024^[31]) (OECD, 2018^[32]).

Inequality in LAC spans across different dimensions, including access to the labour market or education services. Disadvantages are then transmitted to future generations, and the children of low-skilled, low-educated adults are unlikely to have access to quality education and formal training. Since both educational attainment and skills are associated with increased employment and wages, the lack of access to quality education and training prevents them from improving their socio-economic status compared to their parents, hindering “intergenerational social mobility” (OECD, 2023^[30]) (De La Mata, 2023^[33]). Consequently, existing inequalities continue to persist (Hout and DiPrete, 2006^[34]).

Therefore, access to quality education and opportunities for skill development are crucial for promoting inclusive growth in the region. However, individuals from disadvantaged socio-economic backgrounds often face limited chances for success. While no country is free from socio-economic inequalities, some perform better than others.

Education, skills, and labour opportunities are key factors in addressing inequality and enhancing mobility. Therefore, for Latin America and the Caribbean to achieve inclusive growth, it must implement policies and practices that equip its population with the necessary skills to join the workforce effectively, regardless of their socio-economic background (Arnold et al., 2024^[35]) (OECD et al., 2022^[36]). Furthermore, education systems and training programs must be of high quality. Although the region has made significant progress in educational attainment over the past few decades, workforce productivity and skill levels still lag behind (OECD, 2023^[30]).

Skills are increasingly important in today's fast-paced labour market, especially with the growing demand for high-skilled workers due to digitalisation. If access to quality education and skill development remains limited to the most advantaged groups, socio-economic disparities in the region may worsen (OECD, 2021^[29]) (OECD, 2022^[37]).

In this context, the Survey of Adult Skills, also known as PIAAC (Programme for the International Assessment of Adult Competencies), represents the largest and most comprehensive international assessment of adult skills (ages 16-65) ever conducted. It provides valuable data and insights by measuring skill levels in LAC countries and facilitates the analysis of the relationship between education systems and the labour market, as well as the integration of specific subgroups within the population (OECD, 2013^[38]). The first cycle of the survey was conducted through three rounds of data collection,

encompassing a total of 39 countries and economies. This includes four Latin American countries: Chile in the second round (2014-2015), and Ecuador, Mexico, and Peru in the third round (2017) (OECD, 2019^[39]) (OECD, 2023^[30]).

PIAAC assesses adults aged 16 to 65 in literacy, numeracy, and problem-solving in technology-rich environments (PSTRE), all of which are essential for effective participation in the labour market and society. The assessment also gauges the use of information and communication technologies, the application of various skills at work and home, and essential competencies like collaboration and time management (OECD, 2019^[39]).

It is also important to note that the World Bank, in collaboration with the OECD, implemented a comparable literacy assessment to PIAAC in select urban areas of Bolivia and Colombia - under the Skills Towards Employability and Productivity (STEP) survey. This program collected data on adult skills in low- and middle-income countries. While the results are not representative of the entire adult population, as the survey was limited to specific urban areas, they provide valuable insights for this report (OECD, 2023^[30]).

PIAAC data reinforces the significance of skills and educational attainment, revealing a strong correlation with higher employment levels and increased wages. Across OECD countries, individuals with low literacy skills are more than twice as likely to be unemployed, experience poorer health, and have lower participation in community and voluntary activities (OECD, 2023^[30]). In contrast, LAC countries exhibit a weaker link between education and employment proficiency, suggesting that higher skill levels are indicative of better job quality (OECD, 2019^[39]).

All Latin American countries that participated in PIAAC displayed low proficiency levels across all three domains assessed. Among them, Ecuador and Peru recorded the lowest mean scores and the highest proportions of working-age adults performing at the lowest proficiency levels. Although Chile and Mexico performed marginally better, their results still fell way below the OECD average. These outcomes align with assessments of school-age children, such as the Programme for International Student Assessment (PISA), in which LAC countries also obtained low results. This will be analysed in depth in Chapter 3.

This chapter will delve into Latin America's workforce skills, and its distribution within the population. Using data from the Survey of Adult Skills, the performance of the Latin American countries that participated in the first cycle of PIAAC will be briefly discussed, with an emphasis on the proficiency levels among different subgroups. The aim is to identify those at a greater disadvantage regarding skills and social mobility. Additionally, the chapter will assess the impact of skill acquisition and the consequences of low skill levels in the region.

The findings are contextualized within the framework of the countries' economic development, highlighting social inequality and strategies to promote intra- and inter-generational mobility. From this perspective, skills empower individuals to collaborate, compete, and connect effectively, fostering both personal and collective advancement. Ultimately, the key takeaway is that enhancing the skill set of Latin Americans provides a sustainable pathway for long-term inclusive growth and development in the region.

Results in Latin America

In its first cycle, the Survey of Adult Skills (PIAAC) measured proficiency in three key information processing skills: literacy, numeracy and problem solving in technology-rich environments (PSTRE). This assessment was conducted over three rounds in 39 countries, including four Latin American countries: Chile, Ecuador, Mexico, and Peru. The survey included 245,000 adults aged 16 to 65, representing a total population of 1.15 billion people (OECD, 2024^[40]).

In the context of the assessment, literacy is defined as “the ability to understand, evaluate, use and engage with written texts in order to participate in society, achieve one’s goals, and develop one’s knowledge and potential.” PIAAC was the first international survey to include digital texts as an integral part of its

assessment to account for the increasing role of digital devices and applications in generating, accessing, and storing written text. Then, numeracy is defined as the ability to access, use, interpret, and communicate mathematical information and ideas to engage in and manage the mathematical demands of a range of situations in adult life. Finally, PSTRE is described as “using digital technology, communication tools and networks to acquire and evaluate information, communicate with others and perform practical tasks.” This skill set focuses on “the abilities to solve problems for personal, work, and civic purposes by setting up appropriate goals and plans, by accessing and making use of information through computers and computer networks”, making it particularly relevant for today’s workforce.

Box 2.1. Understanding PIAAC scores

All three domains’ results are reported on a scale ranging from 0 to 500. Proficiency levels, defined by specific score-point ranges, help interpreting the scores, as each level is associated with a description of the concrete tasks that adults scoring in that range are able to perform.

Both literacy and numeracy have six proficiency levels (from below Level 1 to Level 5), while PSTRE has four (from below Level 1 to Level 3). The literacy and numeracy results are displayed as mean proficiency scores for each country and the percentage of the population at each proficiency level.

For PSTRE, average proficiency scores are not reported, because only a selected share of the population (those with sufficient familiarity with computers) was able to complete the assessment. As a result, average scores in PSTRE do not cover the entire adult population.

Source: (OECD, 2013^[38])

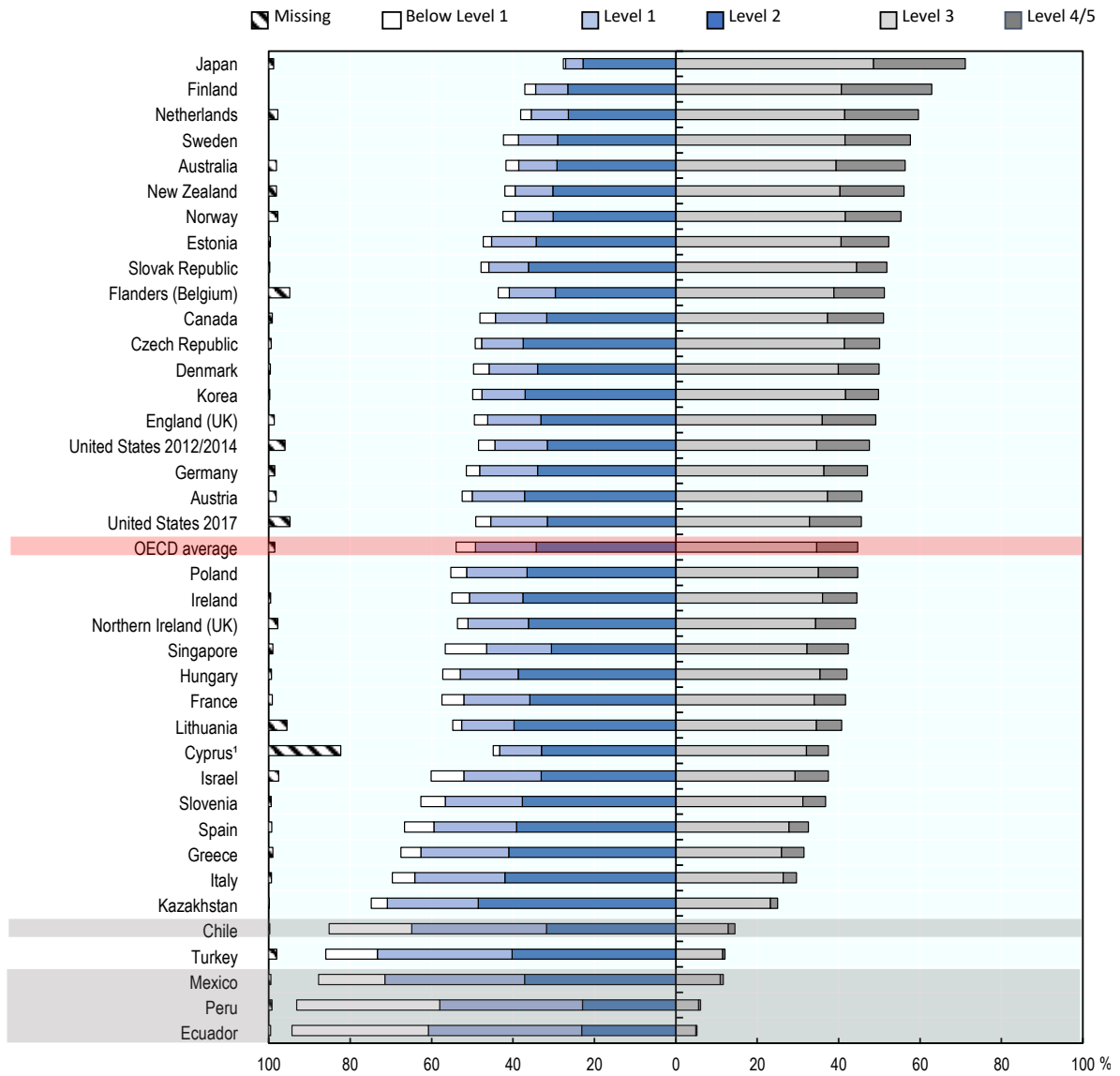
In Latin America, the data revealed significant disparities in skill levels among countries, with all four participating LAC nations exhibiting low overall proficiency in literacy, numeracy, and problem-solving in technology-rich environments (PSTRE). Specifically, these countries ranked among the lowest in literacy and numeracy. For PSTRE, a significant proportion of their populations lacked the basic digital skills necessary to even complete the assessment.

In literacy, nearly half of the adults (44.6%) in participating OECD countries and economies scored at the three highest levels (Level 3, 4 or 5). In contrast, only 1 in 8 adults in Latin America achieved similar scores. While less than 20% of adults in OECD countries scored at Level 1 or below, over half of adults in Chile, Ecuador, Mexico, and Peru fell into the lowest proficiency categories (**see Figure 2.1**). The average literacy score across all countries was 266 points; Mexico, Chile, Peru, and Ecuador scored significantly lower, with 222, 220, 196, and 196 points respectively (OECD, 2023^[30]). Their performance in the literacy assessment situates all four Latin American countries at the bottom of the distribution among OECD countries.

These results are concerning, as studies have shown that low literacy scores are associated with a higher likelihood of unemployment or working in the informal sector, and low wages. Across the OECD countries and economies that took part in the Survey of Adult Skills, an individual who scores 48 points higher on the literacy scale (equivalent to one standard deviation) is 0.8 percentage points more likely to be employed than unemployed (OECD, 2016^[41]). This has implications not only for the individuals affected, but also for future generations.

Figure 2.1. Literacy proficiency among 16-65-year-olds, percentage at each level (%)

Percentage of adults scoring at each proficiency level in literacy



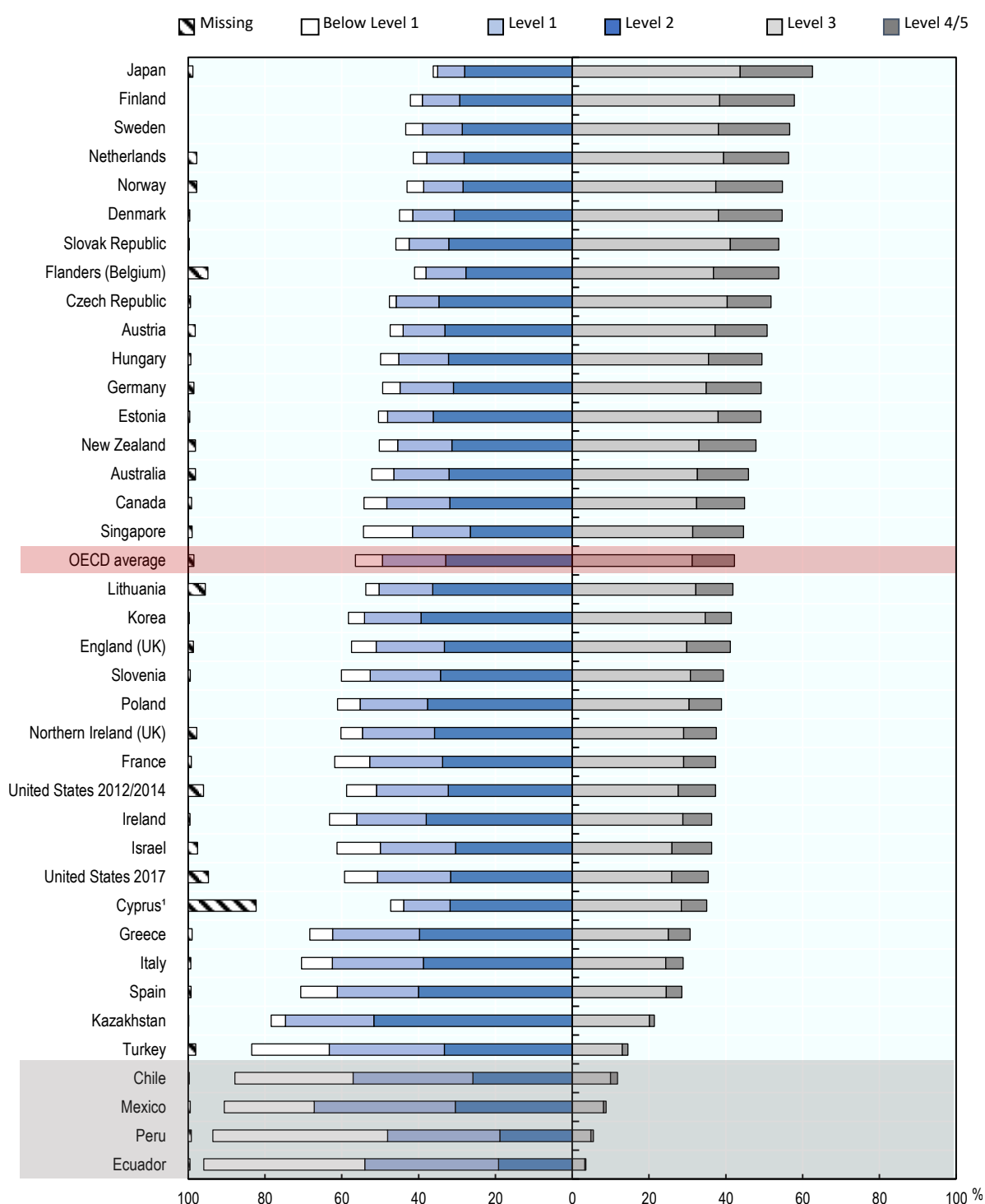
Note: Adults in the missing category were not able to provide enough background information to impute proficiency scores because of language difficulties, or learning or mental disabilities (referred to as literacy-related non-response).

Countries and economies are ranked in descending order of the combined percentages of adults scoring at Level 3 and at Level 4/5.

Source: Survey of Adult Skills (PIAAC) (2012, 2015, 2018), Table A2.1.

Figure 2.2. Numeracy proficiency among 16-65-year-olds, percentage at each level (%)

Percentage of adults scoring at each proficiency level in numeracy



Note: Adults in the missing category were not able to provide enough background information to impute proficiency scores because of language difficulties, or learning or mental disabilities (referred to as literacy-related non-response).

Countries and economies are ranked in descending order of the combined percentages of adults scoring at Level 3 and at Level 4/5.

Source: Survey of Adult Skills (PIAAC) (2012, 2015, 2018), Table A2.3.

In Numeracy, an average of 42.2% of adults across participating OECD countries and economies scored at the highest levels, Level 3 or higher. In Latin America, however, the proportions were much lower with only 11.9% in Chile, 8.9% in Mexico, 5.6% in Peru and only 3.6% in Ecuador. On the other hand, about three-quarters of adults in Ecuador (76.8%), and Peru (74.8%), as well as 61.9% Chile and 60.1% in Mexico scored at Level 1 or below (**see Figure 2.2**). The average numeracy score for OECD countries is 262 points whereas Latin American countries recorded significantly lower scores: Peru (179), Ecuador (185), Chile (206), and Mexico (210). This places all four Latin American countries that participated in the assessment at the bottom of the proficiency rankings for adults. Similar to literacy, numeracy results can impact adults in terms of employment and earnings. In terms of numeracy, those who score one standard deviation higher on the numeracy scale are 1.6 percentage points more likely to be employed rather than unemployed (OECD, 2016^[41]).

The share of the population for which PSTRE proficiency estimates are available varies widely. Therefore, the focus is on defining the population proportions at each proficiency level instead of comparing average proficiency scores. PIAAC provides two related insights into adults' ability to manage information in technology-rich environments. First, it identifies the proportion of adults who are familiar with computers to perform information-processing tasks. Second, it assesses the proficiency levels among these adults in solving problems they are likely to encounter as workers, citizens, and consumers in a technology-rich world (OECD, 2023^[30]).

On average, 29.7% of adults in OECD countries score at the higher levels in PSTRE, levels 2 or 3. In Latin America, these proportions are much lower: Chile has only 14.6% of adults, followed by Mexico (10.2%), Ecuador (5.2%), and Peru (6.6%). On the other hand, 43% of adults across all participating OECD countries scored at Level 1 and below. In Ecuador, a similar proportion (43.1%) was observed, while in Chile, the figure was nearly 10 percentage points higher at 52.4%. Additionally, adding to those with low levels of digital skills, a large share of adults in Chile (25.2%), Ecuador (32.9%), Mexico (39.3%), and Peru (43.6%) failed the core digital skills test or lacked the computer experience to undertake the assessment. As a result, many adults may not even achieve the lowest proficiency levels (**see Figure 2.3**).

The low skill levels in the four participating Latin American countries are concerning as low-skilled workers are less productive and more likely to work in the informal sector: two significant issues in Latin America (OECD, 2016^[13]; Sehnbruch, Apablaza and Foster, 2024^[31]). Given that informal sector workers lack social protection and that low-skilled individuals face greater unemployment risks, their vulnerability to poverty and barriers to social mobility become evident (Arnold et al., 2024^[35]). Moreover, if opportunities for human capital accumulation are not equitably distributed across the population, the effectiveness of formal education and training in promoting inclusive growth is significantly limited.

Figure 2.3. PSTRE proficiency among 16-65-year-olds, percentage at each level (%)

Proficiency in problem solving in technology-rich environments among adults

Note: Adults included in the missing category were not able to provide enough background information to impute proficiency scores because of language difficulties, or learning or mental disabilities (referred to as literacy-related non-response). The missing category also includes adults who could not complete the assessment of problem solving in technology-rich environments because of technical problems with the computer used for the survey. Cyprus¹, France, Italy and Spain did not participate in the problem solving in technology-rich environments assessment. Countries and economies are ranked in descending order of the combined percentages of adults scoring at Level 2 and 3. Source: Survey of Adult Skills (PIAAC) (2012, 2015, 2018), Table A2.7.

Skill differences by background

By Socio-economic background

PIAAC collects information on parents' educational attainment, which serves as a good proxy for socio-economic background. The data highlights the significant impact of someone's background on adult skill levels and the transmission of inequalities. Figure 2.4 illustrates the disparity in literacy proficiency among individuals with varying levels of parental educational attainment. Results show that across the three rounds of the study, adults with at least one tertiary-educated parent score on average 41 points more than adults from families in which neither parent attained upper secondary education.

In Ecuador and Mexico, the differences between both groups are very close to the OECD average, at 41 score points. In contrast, they are much higher in Chile with 51 points and Peru with 55 points, meaning that in these two countries parents' education is a very important predictor of skills, which makes social mobility more challenging.

These differences are still large after accounting for personal characteristics such as own educational attainment, social background, engagement with literacy, numeracy, and ICT, among others. Against the OECD average difference of 20 points, Mexico records a slightly lower difference of 18 points. However, Chile, Ecuador and Peru record larger differences of 23, 24 and 29 points respectively.

These wide gaps related to parents' educational levels can be attributed to both direct and indirect socio-economic influences on children's skills. Considering the four PIAAC countries, - Chile, Ecuador, Mexico and Peru - and the additional urban areas in Bolivia and Colombia -included by the World Bank - it is possible to observe in Figure 2.5 that the mother's educational attainment is an important predictor of an individual's education level, particularly for women (OECD, 2023^[30]).

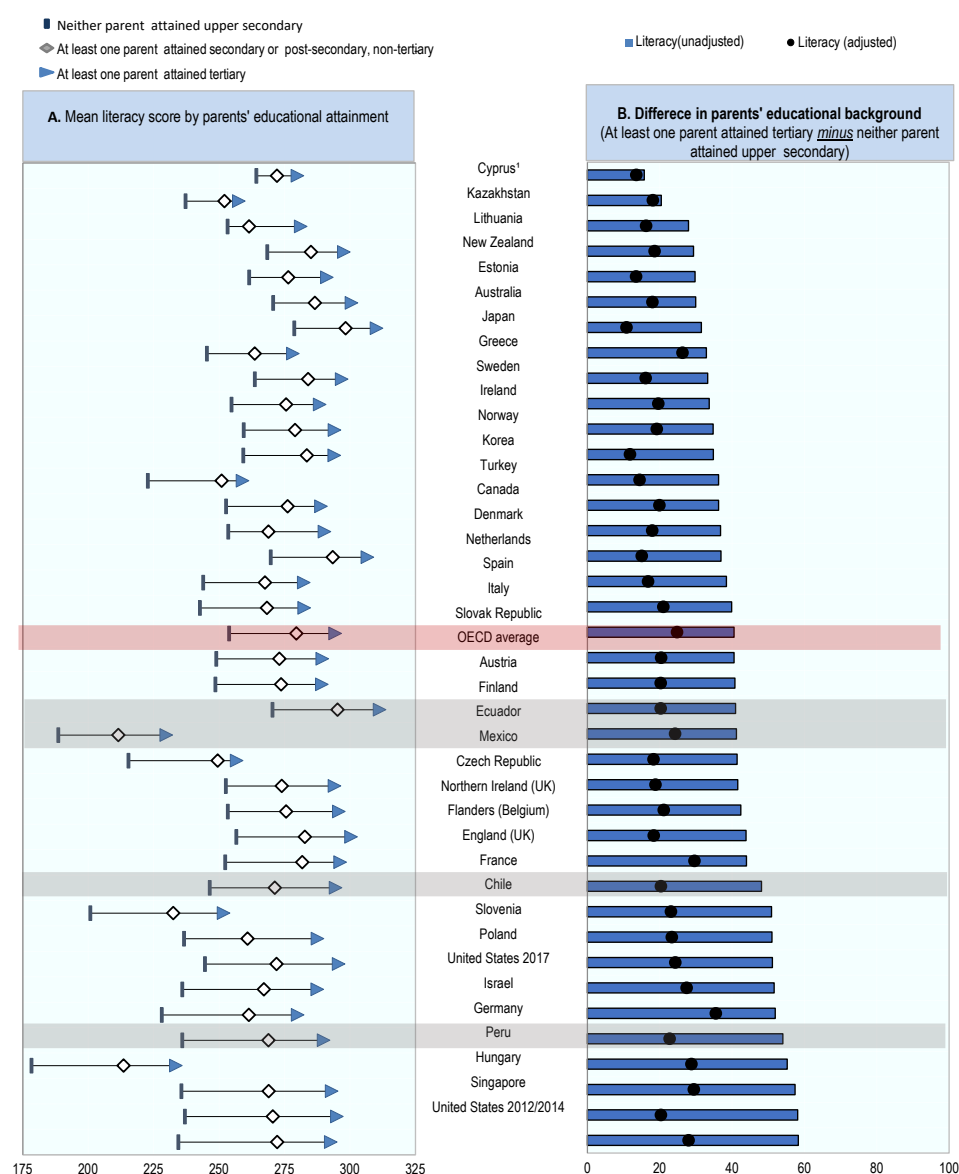
When comparing the participating LAC countries to the OECD, it becomes clear that the impact of mothers' education on children's outcomes is much stronger in the former group. This is evidenced by the fact that men and women whose mothers have incomplete upper secondary education or less are four times more likely than their OECD counterparts to achieve no more than a primary education (OECD, 2023^[30]). When considering mothers' educational attainment among LAC countries participating in PIAAC, 39% of women whose mothers had some tertiary education complete upper secondary education and 45% completed tertiary education. In contrast, only 30% of women whose mothers had secondary education or lower achieved upper secondary, and just 16% completed tertiary education. For men, those with mothers who had a tertiary education are more likely to have completed upper secondary (42%), but less likely to have obtained a tertiary degree (40%). Similarly, only 16% of men with mothers who had upper secondary education or lower earned a tertiary degree. These men are also less likely than women to complete only primary education (24%) and more likely to finish upper secondary (33%). In comparison, nearly a third of individuals across OECD countries attain a tertiary degree, even when their mothers have only upper

secondary education or lower. Although parental education affects their children, the introduction of age in the analysis reveals a contrasting trend in educational mobility between the OECD and LAC, according to PIAAC and STEP data. Among different age cohorts of PIAAC respondents, educational mobility is declining for younger generations in OECD countries, while seems to be slightly increasing for younger generations in Latin America. (OECD, 2018^[42]).

This trend is largely driven by the expansion of primary and secondary education in LAC, particularly for individuals in lower income brackets and those from households with low educational attainment (Neidhöfer, Serrano and Gasparini, 2018^[43]). However, at higher education levels, such as short-cycle tertiary education and above, access has increased more significantly for those from middle and high socioeconomic backgrounds. This shift has limited education's ability to promote skill acquisition and enhance social mobility (OECD, 2021^[44]). A widely recognized finding is that family influences account for 45-50% of the variation in years of schooling (Salvanes and Bjorklund, 2010^[45]).

Figure 2.4. Differences in literacy proficiency for 15-65-year-olds, by parents' educational attainment

Differences in literacy proficiency, by parents' educational attainment

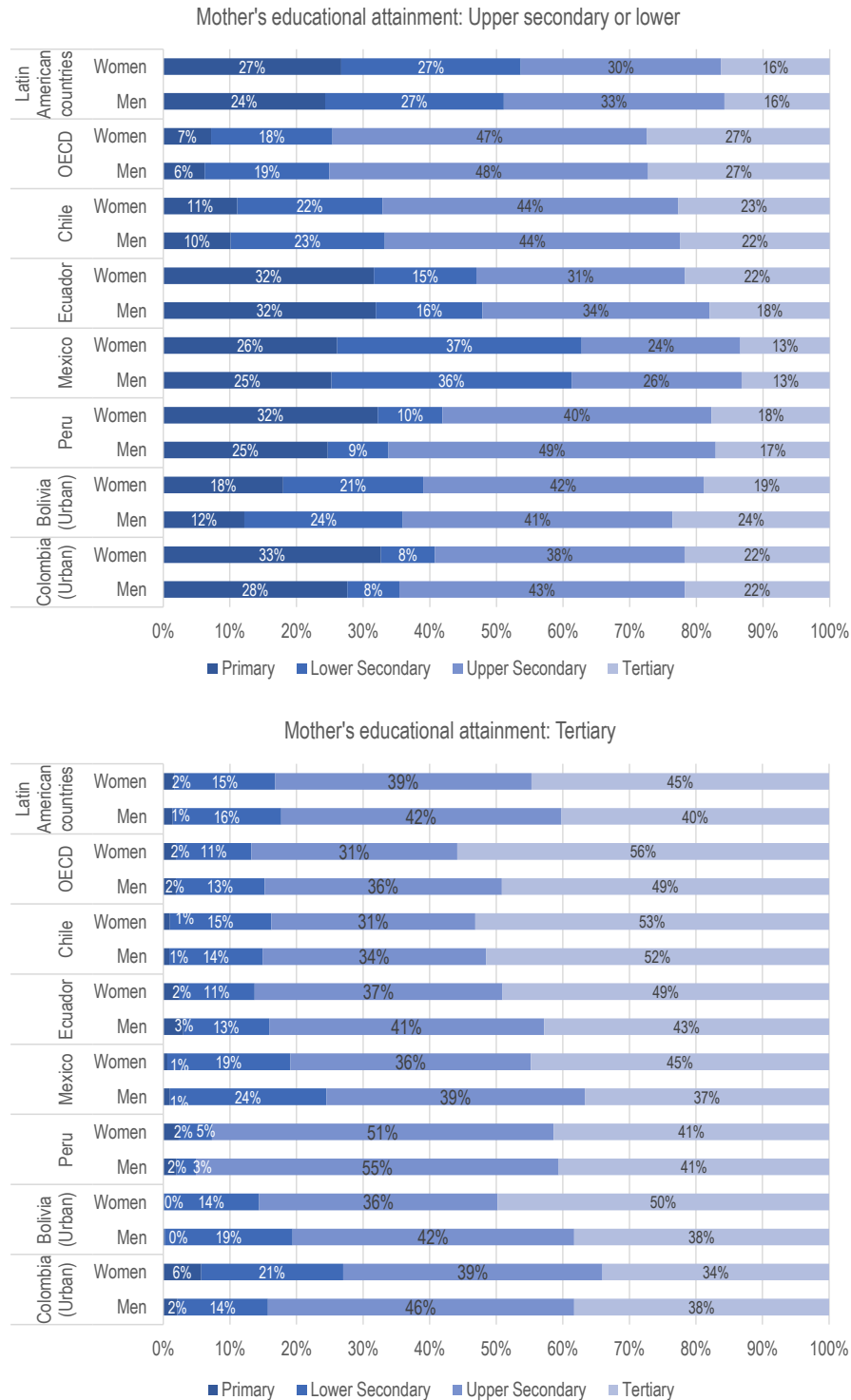


Note: All differences in Panel B are statistically significant. Unadjusted differences are the differences between the two means for each contrast category. Adjusted differences are based on a regression model and take account of differences associated with other factors: age, gender, education, immigrant and language background. Only the score-point differences between two contrast categories are shown in Panel B, which is useful for showing the relative significance of parents' educational attainment with regard to observed score-point differences. Upper secondary includes ISCED 3A, 3B, 3C long and 4. Tertiary includes ISCED 5A, 5B and 6. The adjusted difference for the Russian Federation is missing due to the lack of the language variables.

Countries and economies are ranked in ascending order of the unadjusted difference in literacy scores (at least one parent attained tertiary minus neither parent attained upper secondary).

Source: Source: Survey of Adult Skills (PIAAC) (2012, 2015, 2018), Tables A3.1(L) and A3.11(L).

Figure 2.5. Educational attainment among 25-65-year-olds, by gender and mother's education attainment



Note: For STEP, tertiary includes ISCED 2011 Level 4 (post-secondary non-tertiary) or higher educational attainment. LAC statistics only include PIAAC countries. OECD statistics exclude Latin American member countries.

Source: Authors' calculations using PIAAC data (OECD, n.d.[5]) for Chile, Ecuador, Mexico and Peru and STEP data (World Bank, n.d.[6]) for urban Bolivia and urban Colombia.

Education is a key factor in facilitating upward social mobility (Hout and DiPrete, 2006^[34]). While increases in educational attainment in LAC should ideally enhance overall skill levels among workers, the effectiveness of skill acquisition will depend on the quality of the education system and its ability to prepare students for the workforce.

PIAAC data provides evidence of improved performance with higher educational attainment. In all assessed countries and economies, adults with higher levels of educational attainment perform better, and Chile, Ecuador, Mexico, and Peru are no exception.

Overall, OECD countries participating in PIAAC have an average literacy score difference between tertiary-educated adults and those with below upper secondary education of 61 points. In Latin America, Ecuador and Mexico show smaller differences (45 and 52 points respectively), while Peru and Chile exhibit larger gaps (71 and 77 points respectively).

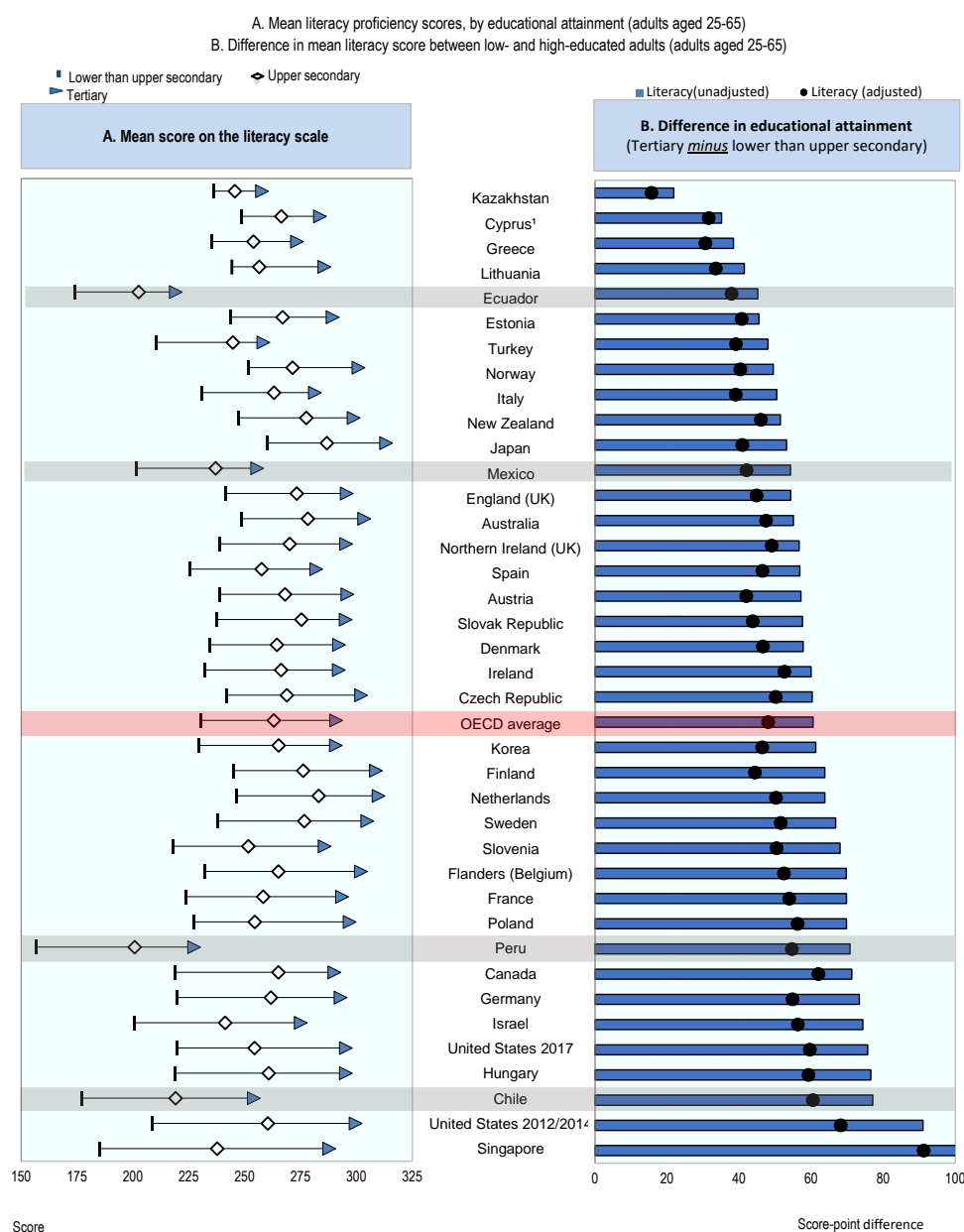
Figure 2.6 shows that in Chile, Ecuador, Mexico, and Peru, literacy levels are consistently lower than the OECD average across all educational levels. In Peru, adults without an upper secondary qualification score an average of 157, which is lower than their peers in Chile (177), Ecuador (174), and Mexico (201). Consequently, 67% of these adults in Peru score below Level 1 in literacy, while Ecuador follows with 50% of adults scoring below this level. In contrast, tertiary-educated adults in Peru exhibit higher literacy proficiency than their peers in Ecuador, yet although both countries still trail behind Chile and Mexico. Among those with upper secondary education or less, Mexican adults show the highest proficiency in literacy and numeracy among Latin American participants, with their tertiary-educated adults' scores aligning with those in Chile, but still much lower than OECD countries.

Differences in proficiency related to educational attainment are also visible in PSTRE. In most countries, a significant share of low-educated adults (those without upper secondary education) lacked the basic ICT skills needed for the assessment. A total of forty-one percent of low-educated respondents across OECD countries did not receive a score in this domain - meaning that they did not have the necessary digital skills to undertake the survey with even higher shares in Latin America: about 60% in Chile, nearly 70% in Ecuador and Mexico, and over 85% in Peru (see Figure 2.7). Among low-educated adults who did take the assessment, only around 7% across OECD countries scored at Level 2 or 3, compared to approximately 1% in Mexico and even lower in the other Latin American countries. In contrast, nearly 48% of tertiary-educated adults in OECD countries scored at the highest levels, 2 or 3, with lower proportions of the population performing at similar levels in Latin America: 12% in Ecuador, 14% in Peru, 26% in Mexico, and 30% in Chile.

In summary, parents' educational attainment has a greater impact on individuals' skill-levels in Latin America compared to the OECD. This may stem from the resources that highly educated parents can provide and, more importantly, from the higher educational achievements of their children. This strong influence on skills and educational attainment hinders education's role in promoting social mobility, as attainment and, thereby, human capital accumulation are conditioned by socio-economic background. This situation negatively affects the region in two ways: first, capable individuals from lower socio-economic backgrounds are unable to realize their potential and contribute more to society; second, it perpetuates inequalities across generations.

The overall underperformance of youth and adults in the participating LAC countries could be indicative of the quality of the education systems in the region. If education systems are not equipping its workforce with the necessary skills, countries in Latin America will continue to exhibit low productivity levels and general low growth levels (IMF, 2024^[46]).

Figure 2.6. Differences in literacy proficiency for 25-65-year-olds, by educational attainment

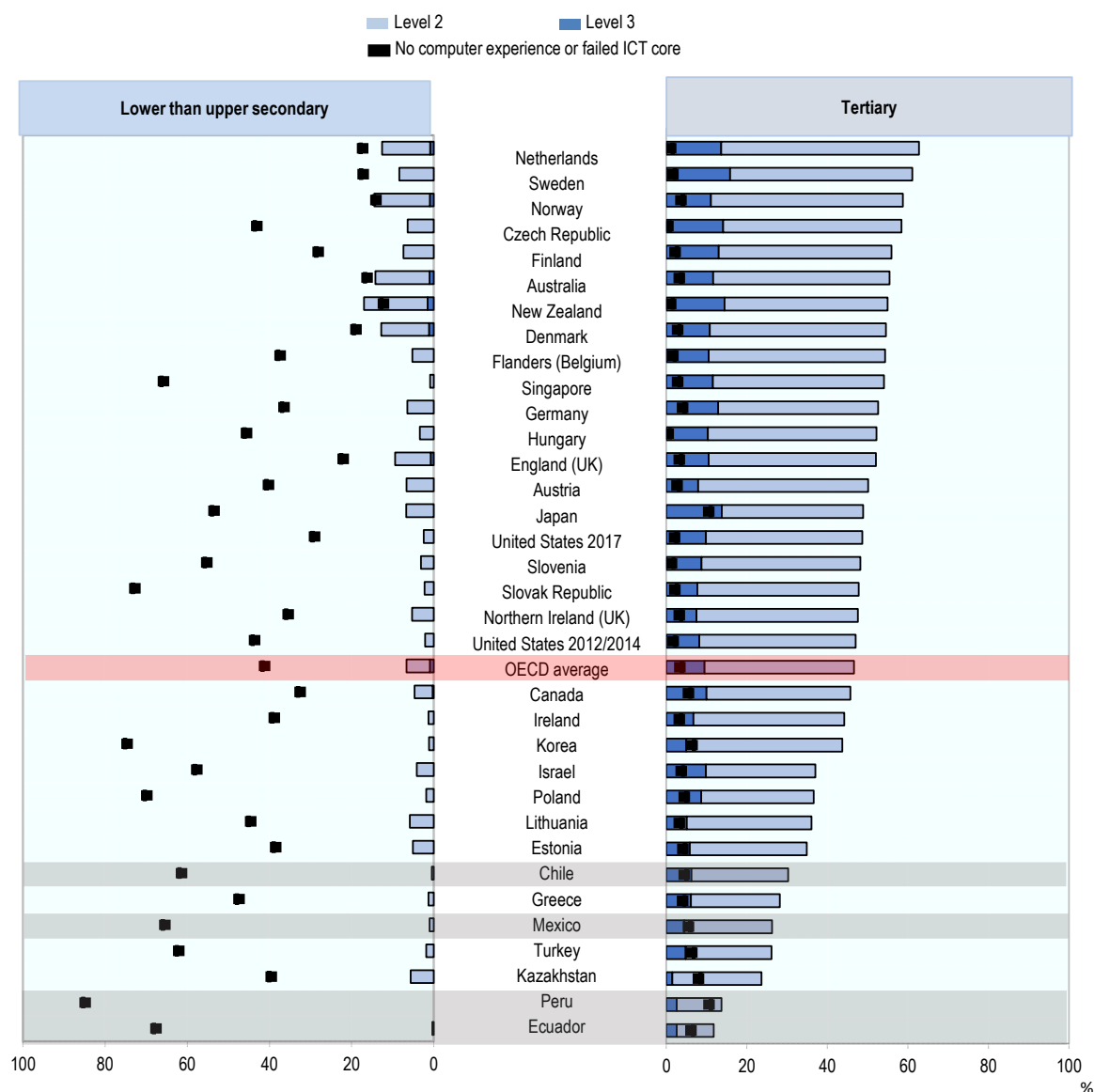


Note: All differences in Panel B are statistically significant. Unadjusted differences are the differences between the two means for each contrast category. Adjusted differences are based on a regression model and take account of differences associated with other factors: age, gender, immigrant and language background and parents' educational attainment. Only the score-point differences between two contrast categories are shown in Panel B, which is useful for showing the relative significance of educational attainment with regard to observed score-point differences. Lower than upper secondary includes ISCED 1, 2 and 3C short. Upper secondary includes ISCED 3A, 3B, 3C long and 4. Tertiary includes ISCED 5A, 5B and 6. Where possible, foreign qualifications are included as the closest corresponding level in the respective national education systems. The adjusted difference for the Russian Federation is missing due to the lack of the language variables. Countries and economies are ranked in ascending order of the unadjusted differences in literacy scores (tertiary minus lower than upper secondary).

Source: Survey of Adult Skills (PIAAC) (2012, 2015, 2018), Tables A3.1(L) and A3.2(L).

Figure 2.7. Differences in PSTRE proficiency for 25-65-year-olds, by educational attainment

Percentage of low- and high-educated adults scoring at Level 2 or 3 in problem solving in technology-rich environments or having no computer experience (adults aged 25-65)



Note: For the purpose of computing the percentages presented in the graph, adults participating in PIAAC has been classified in one of the following mutually exclusive categories: opted out of the computer-based assessment; no computer experience; failed the ICT core test; below Level 1, at Level 1, at Level 2, at Level 3 (of the problem solving in technology-rich environments scale). For more detailed results for each category see the corresponding source table below. Lower than upper secondary includes ISCED 1, 2 and 3C short. Upper secondary includes ISCED 3A, 3B, 3C long and 4. Tertiary includes ISCED 5A, 5B and 6. Where possible, foreign qualifications are included as the closest corresponding level in the respective national education systems. Cyprus¹, France, Italy and Spain did not participate in the problem solving in technology-rich environments assessment.

Countries and economies are ranked in descending order of the combined percentages of adults with tertiary attainment scoring at Levels 2 or 3.

Source: Survey of Adult Skills (PIAAC) (2012,2015), Tables A3.3(P).

Gender

Historically, women have been excluded from formal education and workforce participation, making gender another socio-demographic factor that can influence human capital accumulation and, consequently, a group's ability to ascend the social ladder. Notably, gender differences are more pronounced among older age groups. This is due, in part, to women's educational attainment gradually reaching parity with men's. Additionally, even with similar levels of education, women and men often pursue different occupations or face distinct labour market outcomes. Figure 2.8 records the gender gap in literacy and numeracy skills, both unadjusted and adjusted for other personal characteristics. As can be observed, there is a larger gap between women and men in numeracy than in literacy. Among LAC countries, Chile (21 points) and Peru (16 points) especially depict a larger gender gap than the OECD average (11 points) in numeracy. However, these gaps decrease to 5 and 8 score points, respectively, among adults aged 24 and under, falling below the OECD average. Mexico (11 points) and Ecuador (9 points) have a gender gap in numeracy that is very close to the OECD average. This, coupled with the narrower gender gap displayed by younger cohorts, shows the impact of formal education on skills (OECD, 2023^[30]). Notably, adjusting for education, immigrant background, language, and parents' educational attainment does not significantly alter these results. Nevertheless, despite women gaining access to education over the past decades, they are still influenced by their parents' educational attainment, as shown by Figure 2.5.

Additionally, these differences could likely reflect the differential education and subsequent occupational choices of men and women, affecting the opportunities to practise and maintain a level of high proficiency. For example, the lack of women in STEM — Science, Technology, Engineering and Math — fields further discourages the next generation of girls from pursuing careers in these fields, reinforcing stereotypes that label STEM jobs as more “masculine” (Encinas-Martín and Cherian, 2023^[47]). Thus, these pathways of inequality persist and disrupt the upward mobility of women.

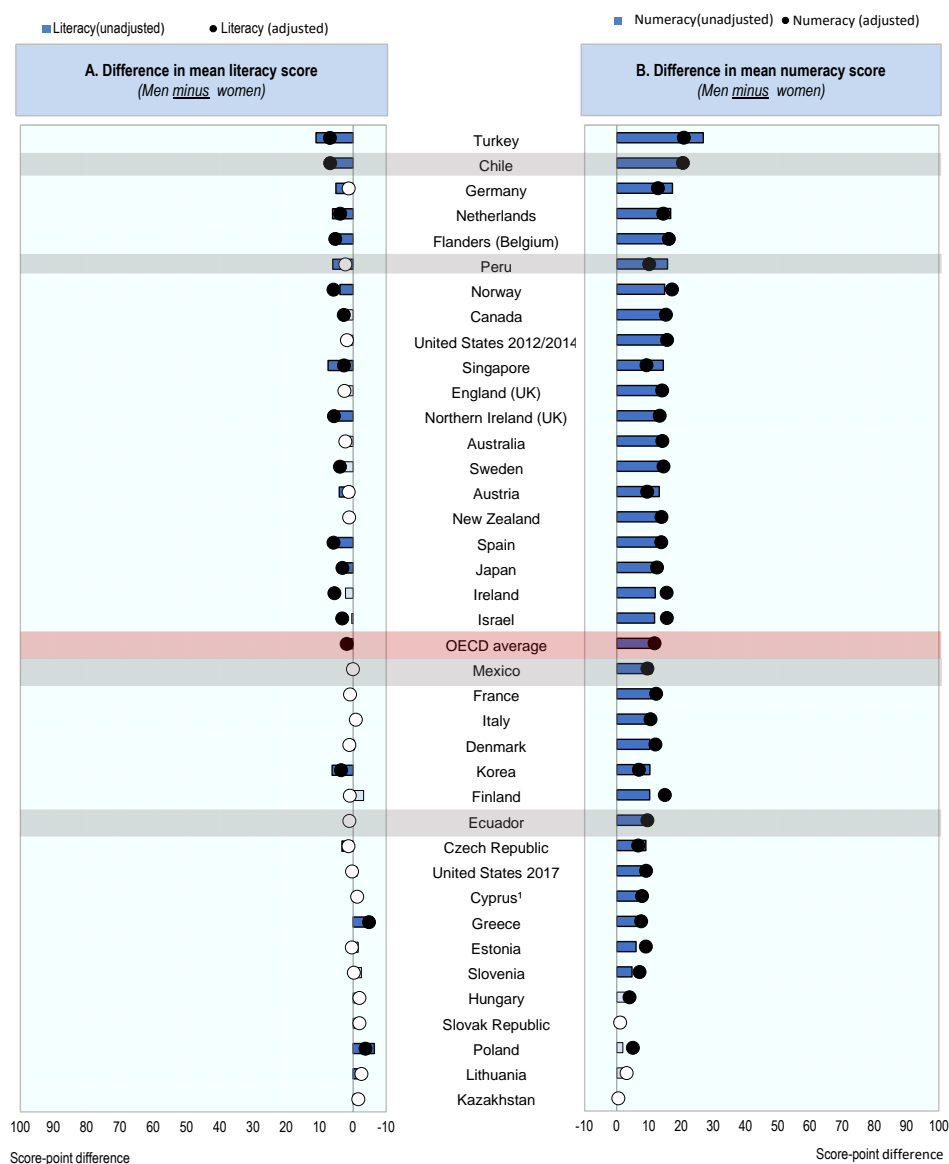
PIAAC data also reveals that in LAC, highly-skilled occupations such as managerial and professional roles, have a slightly higher proportion of men (52.5%) than women (47.6%). However, the opposite is true in medium-skilled occupations, where women account for 59% of the labour force.¹ An analysis by occupation finds a striking over-representation of men among science and engineering professionals, 70.2% of whom are men. In contrast, women are over-represented among health professionals (71.4% women) and teaching professionals (62.5% women) (OECD, 2023).

In summary, gender differences, although higher than OECD levels, are becoming less prevalent in the four LAC participating countries due to increased access to education by younger women. Nevertheless, women are also susceptible to the impact of socio-economic background in terms of educational attainment, which in turn affects their skills and social mobility. Moreover, gender stereotypes and social conventions are an important reasons why young women continue to shy away from STEM studies, which are high paying and have the potential to improve their living conditions considerably.

¹ PIAAC employs the International Standard Classification of Occupations (ISCO). Occupations in groups 7-9 are considered low-skilled, those in groups 4 and 5 are classified as medium-skilled, and occupations in groups 1-3 are regarded as high-skilled.

Figure 2.8. Differences in literacy and numeracy proficiency, by gender

Difference in mean score between men and women



Note: Statistically significant differences are marked in a darker tone. Unadjusted differences are the differences between the two means for each contrast category. Adjusted differences are based on a regression model and take account of differences associated with other factors: gender, education, immigrant background, language and parents' educational attainment. The adjusted difference for the Russian Federation is missing due to the lack of the language variables.

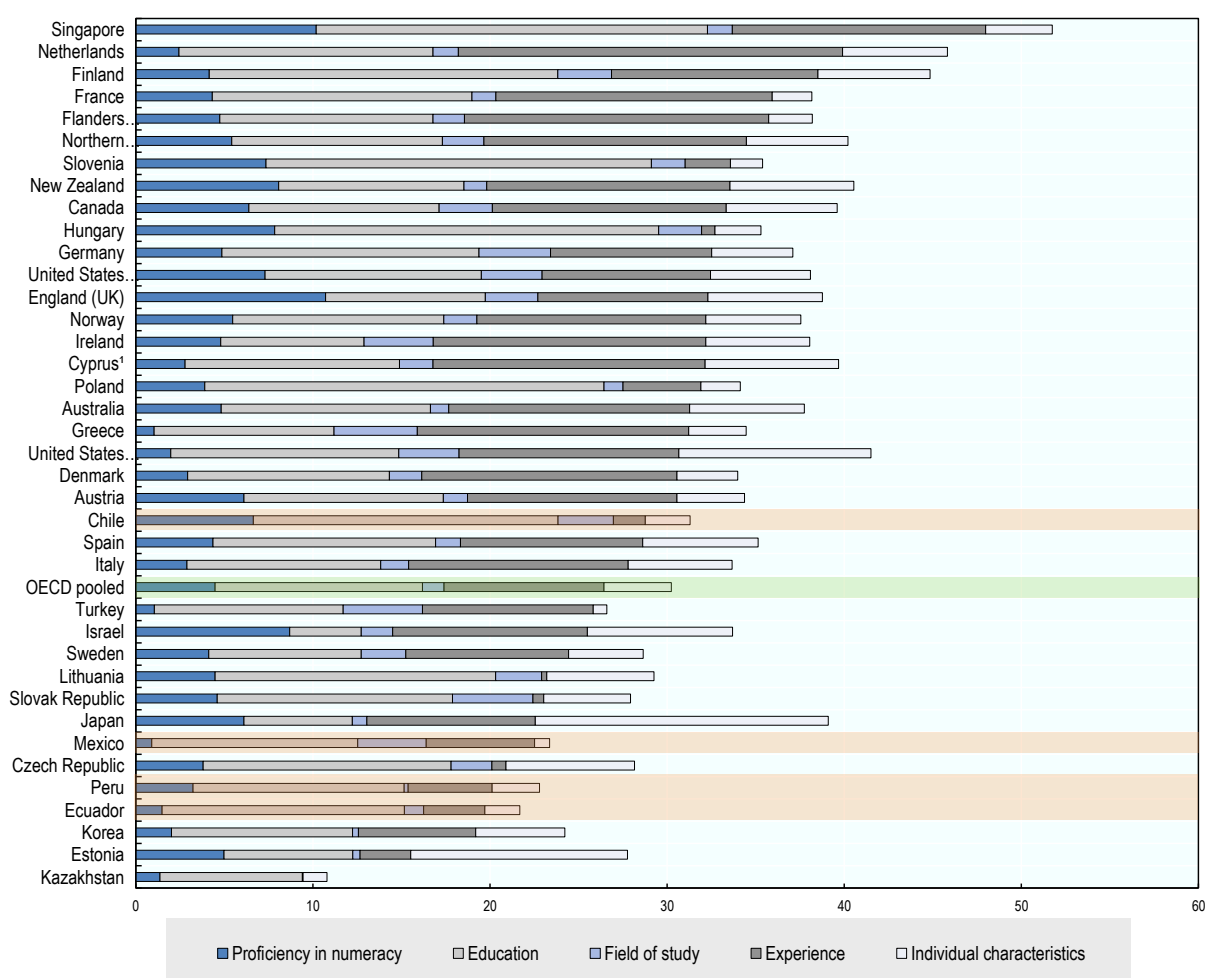
Countries and economies are ranked in ascending order of the difference in numeracy scores (men minus women).

Source: Survey of Adult Skills (PIAAC) (2012, 2015, 2018), Tables A3.1(L), A3.1(N), A3.8(L) and A3.8(N).

Skill acquisition and its impact

Skills are crucial for accessing and comprehending specialized knowledge domains. Because of this, across OECD countries participating in the Survey of Adult Skills, those with higher scores are more likely to be employed and at lower risk of poverty. In Latin America, however, there is no statistically significant relationship between employment and education or proficiency. Employers often struggle to screen candidates effectively, and weak social protection systems lead adults to accept any available job. Consequently, education and proficiency have a greater impact on the quality of employment rather than the quantity of jobs in the region. (OECD, 2019^[39]).

Figure 2.9. Contribution of education, literacy and numeracy to the variation of hourly wages



Note: Results obtained using a regression-based decomposition following the methods in Fields (2003). Each bar summarises the results from one regression and its height represents the R-squared of that regression. The sub-components of each bar show the contribution of each factor (or set of regressors) to the total R-squared. The Fields decomposition is explained in more detail in Box 5.4 of the OECD Employment Outlook 2014 (OECD, 2014b). The dependent variable in the regression model is the log of hourly wages, including bonuses in purchasing power parity-adjusted USD (2012). The regressors for each factor are: years of working experience and its squared term for "experience"; proficiency in literacy and numeracy for "proficiency"; years of education for "education"; and gender, marital status, migration status and language spoken at home for "individual characteristics".

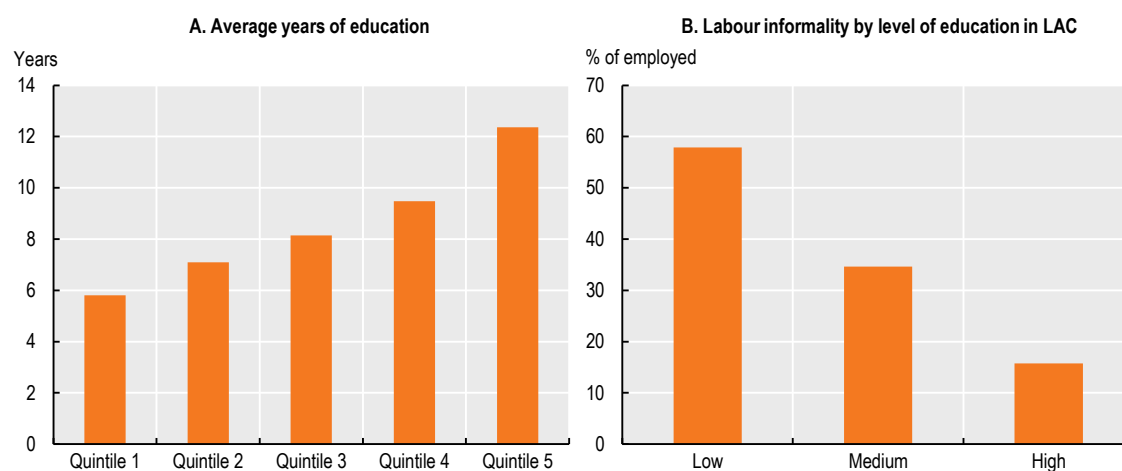
Countries ranked in descending order of contribution of proficiency, education, field of study and experience to the variation of hourly wages.

Source: Survey of Adult Skills (PIAAC) (2012, 2015, 2018), Table A5.3.

In addition to employment, skill levels, and other relevant factors such as educational attainment, field of study and experience have an impact on earnings. On average, across OECD countries proficiency and educational attainment account for 26% of the variance in wages, while in Ecuador, Mexico and Peru they account for 20%. In Chile, on the other hand, they account for 29%; however, in countries like Singapore they explain almost half of the earnings variance (see Figure 2.9).

A second issue related to low skill levels is informality. This ongoing challenge in Latin America and the Caribbean disproportionately affects individuals with lower educational attainment and skills. According to the International Labour Organization (ILO), informality represents nearly 50% of total employment and is a significant factor contributing to inequality and social exclusion in the LAC region. Despite progress, informal employment can still account for 70% or more of employment in some countries (ILO, 2023^[48]). Panel A in Figure 2.10 shows, the average years of education go up as we move up the socio-economic distribution, while the share of those employed in the informal sector goes down with higher levels of education (Panel B).

Figure 2.10. Labour informality and education in Latin America and the Caribbean

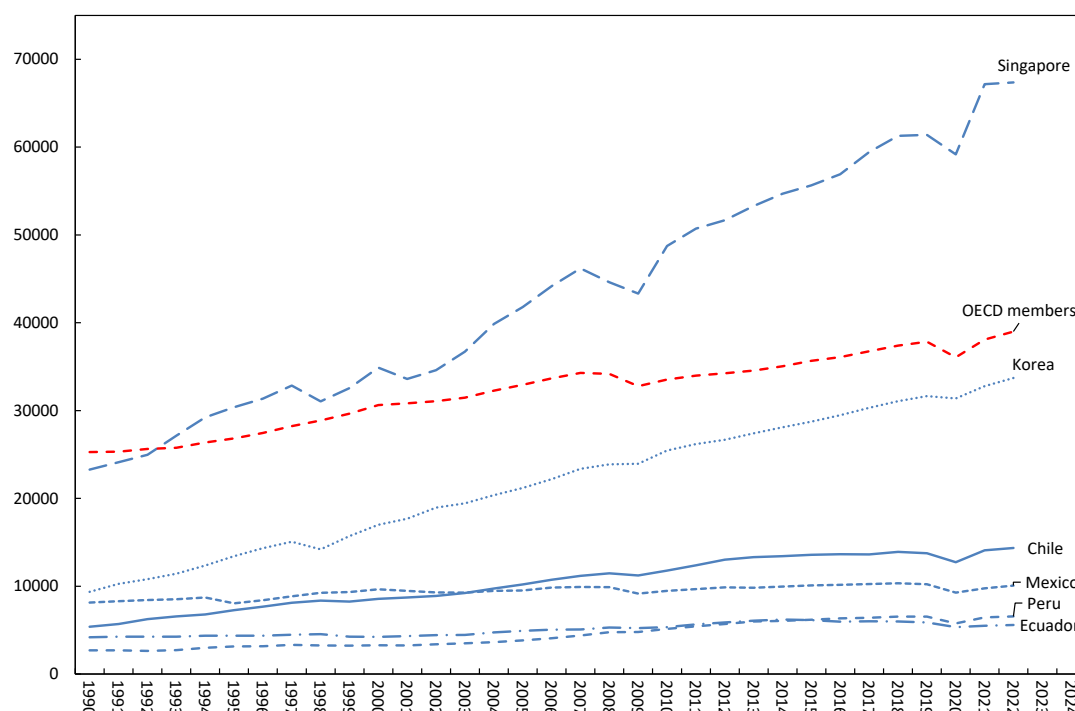


Source: Own calculations based on CEDLAS and the World Bank, 2018.

Informal workers often live in households where other members also work in the informal sector. Because of this, 47% of households in the region depend solely on informal work, whereas 68% depend on it to some degree (Arnold et al., 2024^[35]). Since these workers do not have access to social protection, - which, according to the World Economic Forum, is one of the 10 pillars of social mobility - informality creates a cycle in which low skilled workers do not experience upward social mobility (ILO, 2014^[49]) (World Economic Forum, 2020^[50]). Because of the linkages between family conditions and educational attainment, children growing up in households led by low-skilled workers in the informal sector are less likely to attain higher education levels and experience social mobility. This creates a cycle which further exacerbates the issue of informality and inequality in the region.

At the aggregate level, the region's lack of skill proficiency impacts productivity levels and the region's ability to grow inclusively. The World Bank's Enterprise Survey data revealed that about almost a third (28.6%) of firms in Latin America considered inadequately trained workforce a significant constraint, which means that workers might not meet their jobs' demands, preventing LAC countries from escaping the middle-income trap (OECD, 2023^[30]).

Figure 2.11. GDP per capita, 1990-2022 (constant 2015 USD)



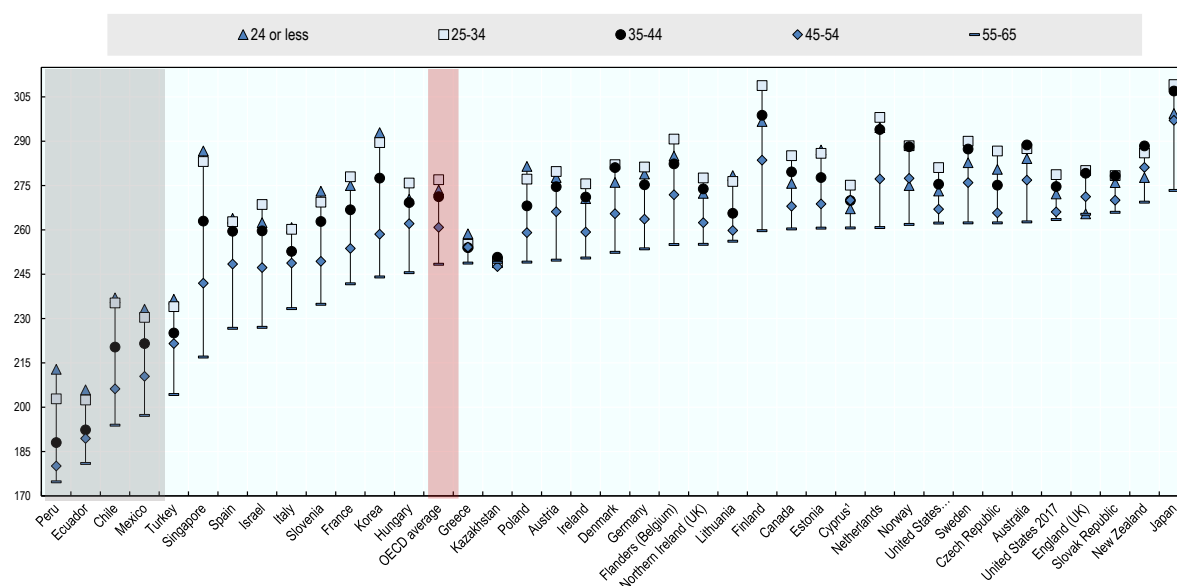
Source: World Bank (2024), GDP per capita (constant 2015 US\$), <https://data.worldbank.org/indicator/NY.GDP.PCAP.KD>

In this context, the experiences of countries like Korea and Singapore are particularly relevant. Both nations had similar income levels to the participating LAC countries in the middle of the last century but have since undergone significant economic development (see Figure 2.11), largely through investments in education (OECD, 2019^[39]).

The impressive growth in Korea and Singapore has been attributed to public education expenditure and the promotion of private investment in higher education. Moreover, Korea's high-quality public education system has facilitated upward social mobility, surpassing levels seen in Germany, the United States, and the United Kingdom -unlike LAC countries, which experience low mobility, low education levels, and high inequality (Kim, 2015^[51]) (OECD, 2018^[32]). Higher social mobility improves job matching, allowing talents to be better recognized, and allowing individuals to climb the social ladder (Jenkins, 2017^[52]).

For Singapore and Korea, the post-war decades were associated with a rapid expansion in education, especially tertiary education. This is discernible through the different proficiency levels in literacy attained by different age segments of the population in the Survey of Adult Skills. As Figure 2.12 shows, both Singapore and Korea show lower mean literacy scores when compared to the OECD average for those aged 45 and more. However, these countries have successfully improved the proficiency of successive generations, with younger cohorts now ranking among the highest performers. This proves that sustainable improvement in the population's skills is feasible, but it demands a sustained, long-term commitment and effective, ongoing investment in education and training (OECD, 2019^[39]).

Figure 2.12. Literacy mean score, by age group



Note: Countries ranked in ascending order by performance of those aged 55-65.

Source: Survey of Adult Skills (PIAAC) (2012, 2015, 2018), Tables A3.1(L) and A3.5(L).

Latin American countries have recently expanded educational opportunities at the lower secondary level, and younger generations exhibit slightly higher skill levels than their older counterparts. However, across all educational levels, adults in the region demonstrate lower average performance compared to OECD countries and other high-income partners. This suggests a clear indication of lower-quality education systems that hinder social mobility and perpetuate persistent inequalities.

Conclusions

PIAAC data indicates that in Latin America, inequality is perpetuated across generations, with socio-economic background significantly influencing individuals' educational attainment and skill levels, thereby affecting social mobility in the region. Furthermore, amid the digital transition that has heightened the demand for skilled workers, this issue may exacerbate inequality levels. Formal education is crucial for proficiency, as adults with higher educational levels, particularly those with tertiary education, demonstrate better skill levels. Gender disparities are more pronounced in the region compared to the OECD average, especially in numeracy. Although the gender gap appears to narrow among younger populations, it could widen again if women do not fully engage in the labour market. This underscores the need for improved educational attainment among young adults, particularly women, in Latin America. While educational attainment has seen significant growth in the region over the past decade, the proportion of low-qualified adults remains substantially higher than in OECD countries. For inclusive growth, Latin America must not only continue to raise educational attainment levels but also enhance access to high-quality education. Despite progress, the skill levels of the workforce in Latin America still lag behind those in OECD countries, irrespective of educational attainment. With increasing digitalization and labour markets transforming to accommodate to it, it will be imperative that countries in the region invest in high-quality education and training focused on productive and relevant sectors. In this context, Korea and Singapore serve as valuable models for LAC countries, having implemented public policies that facilitated rapid access to quality education. Additionally, the high share of adults with low skills poses an issue for the region. This situation

adversely impacts enterprises, as almost 1 in 3 firms in Latin America considered inadequately trained workforce as a major constraint. The low skills level in the region is not only a problem for businesses but also for the workers themselves. Low skill levels are often associated with higher participation rates in the informal sector which does not offer social protection, a crucial aspect for social mobility.

References

- Aleksynska, M. and A. Kolev (2021), “Education-occupation mismatch in the context of informality and development”, *OECD Development Centre Working Papers*, No. 346, OECD Publishing, Paris, <https://doi.org/10.1787/3291e65c-en>. [134]
- Archer, L. (2015), ““Science capital”: A conceptual, methodological, and empirical argument for extending bourdieusian notions of capital beyond the arts”, *Journal of Research in Science Teaching*, Vol. 52/7, pp. 922-948. [100]
- Arias Ortiz, E. et al. (2024), *El estado de la educación en América Latina y el Caribe 2023*, Banco Interamericano de Desarrollo, <https://doi.org/10.18235/0005515>. [65]
- Arias Ortiz, E. et al. (2024), *The State of Education in Latin America and the Caribbean 2023*, <https://publications.iadb.org/en/state-education-latin-america-and-caribbean-2023>. [12]
- Arnold, J. et al. (2024), “Towards better social protection for more workers in Latin America: Challenges and policy considerations”, *OECD Economics Department Working Papers*, No. 1804, OECD Publishing, Paris, <https://doi.org/10.1787/76a04c6f-en>. [35]
- Bourdieu, P. (1986), *The forms of capital*, pp. 241-258. [85]
- Broecke, S., G. Quintini and M. Vandeweyer (2017), “Explaining international differences in wage inequality: Skills matter”, *Economics of Education Review*, Vol. 60, pp. 112-124, <https://doi.org/10.1016/j.econedurev.2017.08.005>. [128]
- Brown, C., T. Hooley and T. Wond (2020), “Building career capital: developing business leaders’ career mobility”, *Career Development International*, Vol. 25/5, pp. 445-459, <https://doi.org/10.1108/CDI-07-2019-0186>. [86]
- Brunner, J. (2013), “The Rationale for Higher Education Investment in Ibero-America”, *OECD Development Centre Working Papers*, No. 319, OECD Publishing, Paris, <https://doi.org/10.1787/5k40d6717l8x-en>. [76]
- Brunori, P., F. Ferreira and G. Neidhöfer (2023), *Inequality of Opportunity and Intergenerational Persistence in Latin America*, <https://publications.iadb.org/en/inequality-opportunity-and-intergenerational-persistence-latin-america>. [8]
- Busso, M. and J. Messina (2020), *The Inequality Crisis: Latin America and the Caribbean at the Crossroads*, <https://publications.iadb.org/en/the-inequality-crisis-latin-america-and-the-caribbean-at-the-crossroads>. [7]
- CAF (2022), *Inherited inequalities: The role of skills, employment, and wealth*, <https://www.caf.com/media/4660888/red2022-re-eng.pdf>. [9]
- Chetty, R. (2022), “Social capital I: measurement and associations with economic mobility”, *Nature*, Vol. 608, pp. 108-121. [88]

- Covacevich, C. et al. (2021), “Indicators of teenage career readiness: An analysis of longitudinal data from eight countries”, *OECD Education Working Papers*, No. 258, OECD Publishing, Paris, <https://doi.org/10.1787/cec854f8-en>. [90]
- De La Mata, D. (2023), “The role of skills, employment, and wealth in the opportunities of new generations.”. [33]
- Diemer, M. (2009), “Pathways to occupational attainment among poor youth of color: The role of sociopolitical development”, *The Counseling Psychologist*, Vol. 39, pp. 6-35. [111]
- ECLAC (2024), *Preventing and reducing school dropout in Latin America and the Caribbean*. [55]
- ECLAC (2023), *Panorama Regional en Educación*, https://www.cepal.org/sites/default/files/presentations/presentacion_d_trucco_cepal.pdf. [58]
- ECLAC, UNESCO and UNICEF (2022), *Education in Latin America and the Caribbean at a crossroads*. [56]
- ECLAC, UNESCO, UNICEF (2024), “Education in Latin America and the Caribbean at a Crossroads: Regional Monitoring Report SDG4—Education 2030”, *Comparative Education Review*, Vol. 68/2, pp. 312-314, <https://doi.org/10.1086/730227>. [66]
- Encinas-Martín, M. and M. Cherian (2023), *Gender, Education and Skills: The Persistence of Gender Gaps in Education and Skills*, OECD Skills Studies, OECD Publishing, Paris, <https://doi.org/10.1787/34680dd5-en>. [47]
- Ferranti, G. (2004), *Inequality in Latin America and the Caribbean: Breaking with History?*. [142]
- Friedman, S. and L. Laurison (2019), *The Class Ceiling: Why it pays to be privileged*, Policy Press. [84]
- Germán Feierherd, P. (2023), *The Pink Tide and Income Inequality in Latin America*, Cambridge University Press. [3]
- Granovetter, M. (1990), *Getting a job: a study of contacts and careers*, Harvard University Press. [97]
- Hanushek, E. et al. (2015), “Returns to skills around the world: Evidence from PIAAC”, *European Economic Review*, Vol. 73, pp. 103-130, <https://doi.org/10.1016/j.euroecorev.2014.10.006>. [127]
- Herdman, P. (2024), *Innovation in career pathways across five countries*, OECD Publishing. [108]
- Hout, M. and T. DiPrete (2006), “What we have learned: RC28’s contributions to knowledge about social stratification”, *Research in Social Stratification and Mobility*, Vol. 24/1, pp. 1-20, <https://doi.org/10.1016/j.rssm.2005.10.001>. [34]
- IDB (2024), [www.iadb.org, https://www.iadb.org/en/news/complexities-inequality-latin-america-and-caribbean#:~:text=March%2006%2C%202024,for%20developed%20countries%20in%20OECD](https://www.iadb.org/en/news/complexities-inequality-latin-america-and-caribbean#:~:text=March%2006%2C%202024,for%20developed%20countries%20in%20OECD). [141]
- IDB (2023), *América Latina y el Caribe en PISA 2022: ¿Cómo le fue a la región?*, <https://publications.iadb.org/publications/spanish/viewer/America-Latina-y-el-Caribe-en-PISA-2022-omo-le-fue-a-la-region.pdf>. [137]

- IDB (2023), *América Latina y el Caribe en PISA 2022: ¿Cuántos tienen bajo desempeño?*, [138]
<https://publications.iadb.org/publications/spanish/viewer/America-Latina-y-el-Caribe-en-PISA-2022-cuantos-tienen-bajo-desempeno.pdf>.
- ILO (2023), *2023 Labour Overview*. [48]
- ILO (2014), *Recent experiences of formalization in Latin America and the Caribbean*. [49]
- IMF (2024), *Regional Economic Outlook for the Western Hemisphere*, [28]
<https://www.imf.org/en/Publications/REO/WH/Issues/2024/04/19/regional-economic-outlook-western-hemisphere-april-2024#:~:text=The%20Western%20Hemisphere&text=Growth%20is%20now%20moderating%2C%20from,policies%20aimed%20at%20curbing%20inflation>.
- IMF (2024), *Regional Economic Outlook for the Western Hemisphere*. [46]
- Inter-American Development Bank (2024), *The Complexities of Inequality in Latin America and the Caribbean*, <https://www.iadb.org/en/news/complexities-inequality-latin-america-and-caribbean>. [4]
- Jenkins, H. (2017), *Social Mobility and Economic Success*. [52]
- Jones, S., A. Mann and K. Morris (2016), “The ‘Employer Engagement Cycle’ in Secondary Education: analysing the testimonies of young British adults”, *Journal of Education and Work*, Vol. 29/7, pp. 834-856, <https://doi.org/10.1080/13639080.2015.1074665>. [101]
- Kashefpakdel, E. (2016), “Career education that works: an economic analysis using the British Cohort Study”, Vol. 30/3, pp. 217-234. [99]
- Kemple, J. (2008), *Career Academies: long-term impacts on labour market outcomes, educational attainment, and transitions to adulthood*, MDRC. [109]
- Kim, H. (2015), *Resetting Education Policy to Restore Social Mobility*. [51]
- Lafuente, E. (ed.) (2022), *¿Como reconstruir la educación postpandemia? Soluciones para cumplir con la promesa de un mejor futuro para la juventud*, Inter-American Development Bank, <https://doi.org/10.18235/0004241>. [143]
- Lee, Y. et al. (2021), “Equity in career development of high school students in South Korea: The role of school career education.”, *Education Sciences*, Vol. 11/1, p. 20, <https://doi.org/10.3390/educsci11010020>. [104]
- LeGallais, T. (2008), *The work experience placements of secondary school students: widening horizons or reproducing social inequality?*, Birmingham City University, https://www.educationandemployers.org/wp-content/uploads/2014/06/the_work_experience_placements_of_secondary_school_students.pdf. [103]
- Lyche, C. (2010), “Taking on the Completion Challenge: A Literature Review on Policies to Prevent Dropout and Early School Leaving”, *OECD Education Working Papers*, No. 53, OECD Publishing, Paris, <https://doi.org/10.1787/5km4m2t59cmr-en>. [68]
- Mann, A. (2024), *Teenage career development in England: A Review of PISA 2022 Data*. [94]

- Mann, A. (2021), *Career ready?: How schools can better prepare young people for working life in the era of COVID-19*, OECD Publishing, <https://doi.org/10.1787/e1503534-en>. [98]
- Mann, A. (2017), "Schools and the twenty-first century labour market: perspectives on structural change", *British Journal of Guidance and Counselling*, Vol. 45/2, pp. 208-218, <https://doi.org/10.1080/03069885.2016.1266440>. [89]
- Mann, A., C. Percy and E. Kashefpakdel (2018), *Socialised social capital: the capacity of schools to use careers provision to compensate for social capital deficiencies among teenagers*, Routledge, London. [106]
- McMahon, W. (1998), *Education and Growth in East Asia*. [19]
- Mercan, M. (2014), *The Effect of Education Expenditure on Economic Growth: The Case of Turkey*. [17]
- Mulakala, T. (2015), *Social Mobility: Experiences and Lessons from Asia*, KDI. [21]
- Nancy Birdsall, D. (1995), *Inequality and Growth Reconsidered: Lessons from East Asia*. [18]
- Neidhöfer, G., J. Serrano and L. Gasparini (2018), "Educational inequality and intergenerational mobility in Latin America: A new database", *Journal of Development Economics*, Vol. 134, pp. 329-349, <https://doi.org/10.1016/j.jdeveco.2018.05.016>. [43]
- New Brunswick Department of Education and Early Childhood Development (2023), *Career Education Framework in New Brunswick*, <https://www2.gnb.ca/content/dam/gnb/Departments/ed/pdf/K12/FRL/nb-career-education-framework.pdf>. [110]
- OECD (2024), *About PIAAC*, <https://www.oecd.org/en/about/programmes/piaac.html>. [40]
- OECD (2024), *Challenging Social Inequality Through Career Guidance: Insights from International Data and Practice*, OECD Publishing, Paris, <https://doi.org/10.1787/619667e2-en>. [83]
- OECD (2024), *Education at a Glance*, OECD Publishing. [69]
- OECD (2024), *Government at a Glance: Latin America and the Caribbean 2024*, https://www.oecd.org/en/publications/government-at-a-glance-latin-america-and-the-caribbean-2024_4abdba16-en.html. [2]
- OECD (2024), *Government at a Glance: Latin America and the Caribbean 2024*, OECD Publishing, Paris, <https://doi.org/10.1787/4abdba16-en>. [139]
- OECD (2024), *Income inequality indicator*, <https://www.oecd.org/en/data/indicators/income-inequality.html>. [5]
- OECD (2024), *OECD Economic Surveys: Mexico 2024*, OECD Publishing, Paris, <https://doi.org/10.1787/b8d974db-en>. [73]
- OECD (2023), *Review Education Policies - Education GPS*, <https://gpseducation.oecd.org/revieweducationpolicies/#!/node=&filter=all>. [16]

- OECD (2023), *Building Future-Ready Vocational Education and Training Systems*, OECD Reviews of Vocational Education and Training, OECD Publishing, Paris, <https://doi.org/10.1787/28551a79-en>. [123]
- OECD (2023), "Career talks with guest speakers: A guide to delivering an effective career development activity", *OECD Education Policy Perspectives*, No. 69, OECD Publishing, Paris, <https://doi.org/10.1787/93594cb3-en>. [96]
- OECD (2023), *Education at a Glance 2023*, https://www.oecd-ilibrary.org/education/education-at-a-glance-2023_e13bef63-en. [14]
- OECD (2023), *Education at a Glance 2023: OECD Indicators*, OECD Publishing, Paris, <https://doi.org/10.1787/e13bef63-en>. [71]
- OECD (2023), *Main Findings from the 2022 OECD Risks that Matter Survey*, OECD Publishing, Paris, <https://doi.org/10.1787/70aea928-en>. [114]
- OECD (2023), *Multi-dimensional Review of El Salvador: Strategic Priorities for Robust, Inclusive and Sustainable Development*, OECD Development Pathways, OECD Publishing, Paris, <https://doi.org/10.1787/2f3d5e1f-en>. [64]
- OECD (2023), *OECD Skills Outlook 2023: Skills for a Resilient Green and Digital Transition*, OECD Publishing, Paris, <https://doi.org/10.1787/27452f29-en>. [115]
- OECD (2023), *PISA 2022 Results (Volume I): The State of Learning and Equity in Education*, <https://doi.org/10.1787/53f23881-en>. [57]
- OECD (2023), *PISA 2022 Results (Volume I): The State of Learning and Equity in Education*, PISA, OECD Publishing, Paris, <https://doi.org/10.1787/53f23881-en>. [116]
- OECD (2023), *PISA 2022: Resultados para América Latina y el Caribe*, https://www.cepal.org/sites/default/files/presentations/presentacion_d_salinas_ocde.pdf. [79]
- OECD (2023), *Skills in Latin America: Insights from the Survey of Adult Skills (PIAAC)*, OECD Skills Studies, OECD Publishing, Paris, <https://doi.org/10.1787/5ab893f0-en>. [30]
- OECD (2022), *Education at a Glance 2022: OECD Indicators*, OECD Publishing, Paris, <https://doi.org/10.1787/3197152b-en>. [72]
- OECD (2022), *Gender Equality in Peru: Towards a Better Sharing of Paid and Unpaid Work*, Gender Equality at Work, OECD Publishing, Paris, <https://doi.org/10.1787/e53901b5-en>. [63]
- OECD (2022), *Pathways to Professions: Understanding higher vocational and professional tertiary education systems*, <https://doi.org/10.1787/a81152f4-en>. [124]
- OECD (2022), *Skills for the Digital Transition: Assessing Recent Trends Using Big Data*, OECD Publishing, Paris, <https://doi.org/10.1787/38c36777-en>. [37]
- OECD (2021), *Education at a Glance 2021*, https://www.oecd-ilibrary.org/education/education-at-a-glance-2021_b35a14e5-en. [13]
- OECD (2021), *Education at a Glance 2021: OECD Indicators*, OECD Publishing, Paris, <https://doi.org/10.1787/b35a14e5-en>. [146]

- OECD (2021), *Experiencing the workplace: the importance and benefits for students*, OECD Publishing, <https://doi.org/10.1787/b679d759-en>. [95]
- OECD (2021), *Future-Ready Adult Learning in Latin America*, https://www.oecd.org/en/publications/future-ready-adult-learning-in-latin-america_18d2f2f1-en.html. [10]
- OECD (2021), *Future-Ready Adult Learning in Latin America. Action Plan*. [44]
- OECD (2021), *How's Life in Latin America? : Measuring Well-being for Policy Making*, https://www.oecd-ilibrary.org/social-issues-migration-health/how-s-life-in-latin-america_2965f4fe-en. [1]
- OECD (2021), *How's Life in Latin America?: Measuring Well-being for Policy Making*, OECD Publishing, Paris, <https://doi.org/10.1787/2965f4fe-en>. [54]
- OECD (2021), *OECD Skills Outlook 2021: Learning for Life*, OECD Publishing, <https://doi.org/10.1787/0ae365b4-en>. [117]
- OECD (2021), *OECD Skills Outlook 2021: Learning for Life*, OECD Publishing, Paris, <https://doi.org/10.1787/0ae365b4-en>. [29]
- OECD (2020), *Dream Jobs? Teenagers' Career Aspirations and the Future of Work*, <https://www.oecd.org/education/dream-jobs-teenagers-career-aspirations-and-the-future-of-work.htm>. [93]
- OECD (2020), *Education at a Glance 2020: OECD Indicators*, OECD Publishing, Paris, <https://doi.org/10.1787/69096873-en>. [122]
- OECD (2020), *OECD Employment Outlook 2020: Worker Security and the COVID-19 Crisis*, OECD Publishing, Paris, <https://doi.org/10.1787/1686c758-en>. [121]
- OECD (2019), *How are PISA results related*. [59]
- OECD (2019), *Getting Skills Right: Future-Ready Adult Learning Systems*, OECD Publishing, Paris, <https://doi.org/10.1787/9789264311756-en>. [125]
- OECD (2019), *PISA 2018 Assessment and Analytical Framework*, PISA, OECD Publishing, Paris, <https://doi.org/10.1787/b25efab8-en>. [77]
- OECD (2019), *PISA 2018 Assessment and Analytical Framework*, <https://doi.org/10.1787/b25efab8-en>. [78]
- OECD (2019), *Skills Matter: Additional Results from the Survey of Adult Skills*, https://www.oecd-ilibrary.org/education/skills-matter_1f029d8f-en. [20]
- OECD (2019), *Skills Matter: Additional Results from the Survey of Adult Skills*, OECD Skills Studies, OECD Publishing, Paris, <https://doi.org/10.1787/1f029d8f-en>. [39]
- OECD (2019), *Survey of Adult Skills (PIAAC)*, <http://www.oecd.org/skills/piaac/publicdataandanalysis/>. [118]
- OECD (2019), *Tackling Vulnerability in the Informal Economy*, https://www.oecd-ilibrary.org/development/tackling-vulnerability-in-the-informal-economy_939b7bcd-en. [15]

- OECD (2018), *A Broken Social Elevator? How to Promote Social Mobility*, OECD Publishing, Paris, <https://doi.org/10.1787/9789264301085-en>. [32]
- OECD (2018), *Equity in Education: Breaking Down Barriers to Social Mobility*, PISA, OECD Publishing, Paris, <https://doi.org/10.1787/9789264073234-en>. [42]
- OECD (2018), *Opportunities for All: A Framework for Policy Action on Inclusive Growth*, OECD Publishing, Paris, <https://doi.org/10.1787/9789264301665-en>. [61]
- OECD (2018), *PISA 2018 Results (Volume I): What Students Know and Can Do*, OECD Publishing, Paris, <https://doi.org/10.1787/19963777>. [147]
- OECD (2017), *OECD Economic Surveys: Argentina 2017: Multi-dimensional Economic Survey*, OECD Publishing, Paris, https://doi.org/10.1787/eco_surveys-arg-2017-en. [67]
- OECD (2017), *To what extent does parents' education influence their children's educational attainment?*, <https://www.oecd-ilibrary.org/docserver/eag-2017-10-en.pdf?expires=1728389065&id=id&accname=guest&checksum=C2C594C3AAF04FEC5984BE4E3002EE60>. [26]
- OECD (2016), *PISA 2015 Results (Volume I): Excellence and Equity in Education*, PISA, OECD Publishing, Paris, <https://doi.org/10.1787/9789264266490-en>. [81]
- OECD (2016), *Skills Matter: Further Results from the Survey of Adult Skills*, OECD Skills Studies, OECD Publishing, Paris, <https://doi.org/10.1787/9789264258051-en>. [41]
- OECD (2015), "Higher education in Latin America: Challenges and opportunities", in *E-Learning in Higher Education in Latin America*, OECD Publishing, Paris, <https://doi.org/10.1787/9789264209992-4-en>. [74]
- OECD (2015), *Survey of Adult Skills (PIAAC)*, <http://www.oecd.org/skills/piaac/publicdataandanalysis/>. [119]
- OECD (2013), *OECD Skills Outlook 2013: First Results from the Survey of Adult Skills*, OECD Publishing, Paris, <https://doi.org/10.1787/9789264204256-en>. [38]
- OECD (2013), *PISA 2012 Results: Excellence through Equity (Volume II)*, https://www.oecd-ilibrary.org/education/pisa-2012-results-excellence-through-equity-volume-ii_9789264201132-en. [27]
- OECD (2012), "Does Money Buy Strong Performance in PISA?", *PISA in Focus*, No. 13, OECD Publishing, Paris, <https://doi.org/10.1787/5k9fhmfzc4xx-en>. [82]
- OECD (2012), *OECD Survey of Adult Skills (PIAAC)*, <http://www.oecd.org/skills/piaac/publicdataandanalysis/>. [120]
- OECD (2010), *Education Policies for Upward Social Mobility in Latin America*, https://www.oecd.org/en/publications/2010/11/education-policies-for-upward-social-mobility-in-latin-america_g17a1f51.html. [126]
- OECD (2010), *Education, Social Mobility and the Middle Sectors*, https://www.oecd-ilibrary.org/development/latin-american-economic-outlook-2011/education-social-mobility-and-the-middle-sectors_leo-2011-9-en. [11]

- OECD (2010), *Latin America Economic Outlook 2011: How Middle Class is Latin America*, [144]
<http://dx.doi.org/leo-2011-en>.
- OECD (2010), *Latin American Economic Outlook 2011: How Middle-Class Is Latin America?*, [75]
 OECD Publishing, Paris, <https://doi.org/10.1787/leo-2011-en>.
- OECD (2010), *The high cost of low education performance*. [60]
- OECD and ILO (2020), *Social Dialogue, Skills and COVID-19*. [133]
- OECD/CAF/ECLAC (2016), *Latin American Economic Outlook 2017: Youth, Skills and Entrepreneurship*, OECD Publishing, Paris, <https://doi.org/10.1787/leo-2017-en>. [145]
- OECD et al. (2023), *Latin American Economic Outlook 2023: Investing in Sustainable Development*, OECD Publishing, Paris, <https://doi.org/10.1787/8c93ff6e-en>. [140]
- OECD et al. (2019), *Latin American Economic Outlook 2019: Development in Transition*, OECD Publishing, Paris, <https://doi.org/10.1787/g2g9ff18-en>. [135]
- OECD et al. (2022), *Latin American Economic Outlook 2022: Towards a Green and Just Transition*, OECD Publishing, Paris, <https://doi.org/10.1787/3d5554fc-en>. [36]
- OECD, E. (2023), *Latin American Economic Outlook 2023. Investing in Sustainable Development*, <https://doi.org/10.1787/20725140>. [136]
- Oxera Consulting LLP (2020), *The impact of social mobility on productivity*, [131]
https://www.suttontrust.com/wp-content/uploads/2020/01/Oxera-report_WEB_FINAL.pdf.
- Patrinos, G. (2004), *Returns to Investment in Education: A Further Update*. [23]
- Perry, B. (2016), “Misalignment of Career and Educational Aspirations in Middle School: Differences across Race, Ethnicity, and Socioeconomic Status”, *Social Sciences*, Vol. 5/3, [92]
<https://doi.org/10.3390/socsci5030035>.
- Renée, L. (2023), *The Long-Term Effects of Career Guidance in High School: Evidence from a randomised experiment*, https://economie.esg.ugam.ca/wp-content/uploads/sites/54/2023/03/Guidance_LRenee_2023.pdf. [112]
- Resnjanskij, S. (2023), *Mentoring erhöht die Ausbildungsbeteiligung benachteiligter Jugendlicher*, <https://www.ifo.de/DocDL/sd-2023-12-ZDG-berufseinstieg-wachstumsfaktor.pdf>. [107]
- Salvanes, K. and A. Bjorklund (2010), “Education and Family Background: Mechanisms and Policies”, *SSRN Electronic Journal*, <https://doi.org/10.2139/ssrn.1620398>. [45]
- Sehnbruch, K., M. Apablaza and J. Foster (2024), “Poor-Quality Employment: Who Is Deprived in Our Labour Markets?”, *LSE Public Policy Review*, Vol. 3/2, [31]
<https://doi.org/10.31389/lsepr.104>.
- Skovhus, R. (2016), “A focus on educational choice has social justice consequences – an empirical study informed by Sen’s capability approach.”, *Journal of the National Institute of Career Education and Counselling*, Vol. 36, pp. 54-60, <https://doi.org/10.20856/jnic>. [105]

- Social Research and Demonstration Corporation (2009), *Future to discover: interim impacts report*, https://srdc.org/wp-content/uploads/2022/07/FTD_IIR_report_ENG.pdf. [113]
- Staff, J. (2010), "Uncertainty in early occupational aspirations: role exploration or aimlessness?", *Social Forces*, Vol. 119, pp. 55-69, <https://doi.org/10.1353/sof.2010.0088>. [91]
- Stanley, J. and A. Mann (2014), *A theoretical framework for understanding employer engagement*, in Mann, A. et al. (eds), *Understanding employer engagement in education*, Routledge, London. [102]
- The Asia Foundation and Korea Development Institute (KDI) (2015), *Social Mobility: Experiences and Lessons from Asia*, The Asia Foundation. [129]
- Tomlinson, M. et al. (2022), "Developing graduate employability for a challenging labour market: the validation of the graduate capital scale", *Journal of Applied Research in Higher Education*, Vol. 14/3, pp. 1193-1209. [87]
- Torche, F. (2014), "Intergenerational Mobility and Inequality: The Latin American Case", *Annual Review of Sociology*, Vol. 40/1, pp. 619-642, <https://doi.org/10.1146/annurev-soc-071811-145521>. [53]
- UNDP (2021), *Trapped? Inequality and Economic Growth in Latin America and the Caribbean*, <https://www.undp.org/latin-america/publications/trapped-inequality-and-economic-growth-latin-america-and-caribbean>. [6]
- UNESCO (2024), *The urgency of educational recovery in Latin America and the Caribbean*. [62]
- UNESCO (2005), *Guidelines for inclusion: ensuring access to education for all*, <https://unesdoc.unesco.org/ark:/48223/pf0000140224>. [25]
- UNICEF (2022), *Two years after: Saving a generation*, <https://www.unicef.org/lac/en/reports/two-years-after-saving-a-generation>. [24]
- Valenzuela, J. (2022), *Trajectory and policies for inclusion in higher education in Latin America and the Caribbean in the context of the pandemic*. [70]
- Willms, J. (2006), "Variation in socioeconomic gradients among cantons in French- and Italian-speaking Switzerland: Findings from the OECD PISA", *Educational Research and Evaluation*, Vol. 12(2), pp. 129-154. [80]
- World Bank (2024), *World Bank Open Data*, <https://data.worldbank.org/> (accessed on June 2024). [130]
- World Bank (2021), *World Development Indicators*, <https://databank.worldbank.org/source/world-development-indicators>. [22]
- World Bank (2020), *World Bank Enterprise Survey*, <https://prosperitydata360.worldbank.org/> (accessed on June 2024). [132]
- World Economic Forum (2020), *The Global Social Mobility Report 2020: Equality, Opportunity and a New Economic Imperative*, World Economic Forum, https://www3.weforum.org/docs/Global_Social_Mobility_Report.pdf. [50]

3

Education and Skills: Social Mobility and Social Inequality in Latin America and the Caribbean

This chapter examines the progress made by Latin America and the Caribbean (LAC) in educational attainment over recent decades, as well as performance on the latest PISA assessment. Findings indicate that the performance of the LAC region remains lower than that of OECD countries, even though the socio-economic gap in the region is narrower in comparison to the OECD average. Consequently, what may appear as a reduced social divide is likely more indicative of the overall low quality of education systems in LAC. The chapter concludes by comparing investment levels in education within the region to those of other countries, revealing that some countries significantly outperform LAC despite similar spending levels. It emphasises that upward educational and social mobility in LAC is achievable through greater and more efficient resource allocation in education.

Introduction

Inequality in Latin America and the Caribbean (LAC), unlike other regions, is characterized by a significant concentration of wealth, a substantial gap between the wealthy and the middle class, and access to quality services limited to a small, affluent group at the top of the income distribution (Torche, 2014^[53]). Education stands out as the most critical service for addressing these opportunity gaps. Expanding access to high-quality education - regardless of income or socio-economic background - would benefit not only individuals but also society as a whole.

Understanding the distinction between social inequality, equity in education, and social mobility is essential in this context. Social inequality refers to the uneven distribution of resources, while equity in education emphasizes equal access to quality learning opportunities for all, regardless of background. Social mobility, on the other hand, is about ensuring that an individual's socio-economic future is determined by their skills and efforts rather than their starting point in life. In LAC countries, both high inequality and low social mobility coexist, significantly limiting opportunities for those from disadvantaged backgrounds.

In highly unequal environments, limited access to quality education results in fewer skills, reduced labour market opportunities, and lower contributions to national productivity, economic growth, and tax revenues. For individuals, lower educational attainment is associated with worse material conditions throughout life, including higher poverty rates, lower employment prospects, increased informal employment, and lower earnings. Over the past decade, labour market polarization due to digitalization has exacerbated these disparities, particularly for those with an upper secondary education or less, as demand for middle-skill jobs has declined.

As highlighted in Chapter 2, the predominant pattern in educational mobility across Latin America and the Caribbean is stagnation. While the region has made significant strides in expanding primary and secondary education coverage over the past few decades, particularly benefiting households with low educational attainment, progress has been uneven. Even today, more than half of adults aged 25 and older in LAC have not completed upper secondary education, compared to less than 30% in OECD countries (OECD, 2021^[54]).

Additionally, despite improvements in access observed in the first two decades of the 21st century, high dropout rates persist and remain one of LAC's most pressing challenges (ECLAC, 2024^[55]). Dropout rates are strongly correlated with socioeconomic status, with students from lower-income families more likely to leave school early to enter the workforce, hindering their pursuit of higher education and limiting their skill development. Alarming, dropout rates have risen further in the aftermath of the COVID-19 pandemic (ECLAC, UNESCO and UNICEF, 2022^[56]).

However, it is important to note that educational attainment—often measured by years spent in school—does not necessarily reflect actual skill levels. This metric fails to provide a clear picture of cognitive abilities and competencies or how they compare to other countries. To address this gap, the OECD introduced the Programme for International Student Assessment (PISA) in 2000. PISA offers an internationally comparable measure of student performance, assessing 15-year-olds in areas like mathematics, science, and reading. It links data from students, teachers, schools, and education systems to analyse disparities in educational outcomes (OECD, 2023^[57]).

The latest assessment was implemented in 2022, with a focus on mathematics. It was the first assessment to take place after the COVID-19 pandemic, when Latin America had the longest school closures in the world with an average of 72 weeks (ECLAC, 2023^[58]). This version of the assessment recorded participation from 14 LAC countries and almost 100,000 students in the region.

PISA 2022 revealed that, despite progress in the region, Latin American students underperform in mathematics, reading and science when compared to the rest of the world. The assessment also revealed differences in performance due to socioeconomic status (a measure that includes parents' educational attainment), in line with the high inequality levels observed in the region. But, more importantly, it revealed the generalized low performance across different groups when compared to OECD countries and lack of baseline proficiency among students. This is particularly relevant for the future of the region, as research indicates that PISA results are linked to success indicators, such as completing a tertiary degree or being in the labour force by age 25 - all indicators that correlate with economic growth (OECD, 2019^[59]).

The LAC region's limited access to high-quality education across socio-economic backgrounds has direct economic consequences, given the established link between cognitive skills and growth. For instance, improving PISA scores by 25 points could result in a 3% GDP increase (OECD, 2010^[60]). However, only Peru (+26 pts), Colombia (+13 pts), and Brazil (+23 pts) have shown consistent gains from their initial assessments to the 2022 evaluation. Education's potential to drive social mobility is diminished when it reinforces rather than reduces income inequality.

Effective education systems are therefore essential for a skilled workforce. A skilled workforce promotes innovation, boosts productivity, and demands for better jobs (OECD, 2018^[61]). Educational outcomes are strongly tied to various measures of well-being in adulthood, such as poverty rates, employment, and income. If educational success is independent of socio-economic background, it fosters social mobility and enables talented individuals even from disadvantaged backgrounds to reach their full potential. In other words, when success in education is not determined by socio-economic background or parental education, education becomes a key driver of both economic growth and social mobility (OECD, 2018^[42]). A more inclusive and prosperous future for LAC depends on expanding access to high-quality education for all, which can promote social mobility and reduce entrenched inequities that have constrained the region's development for decades.

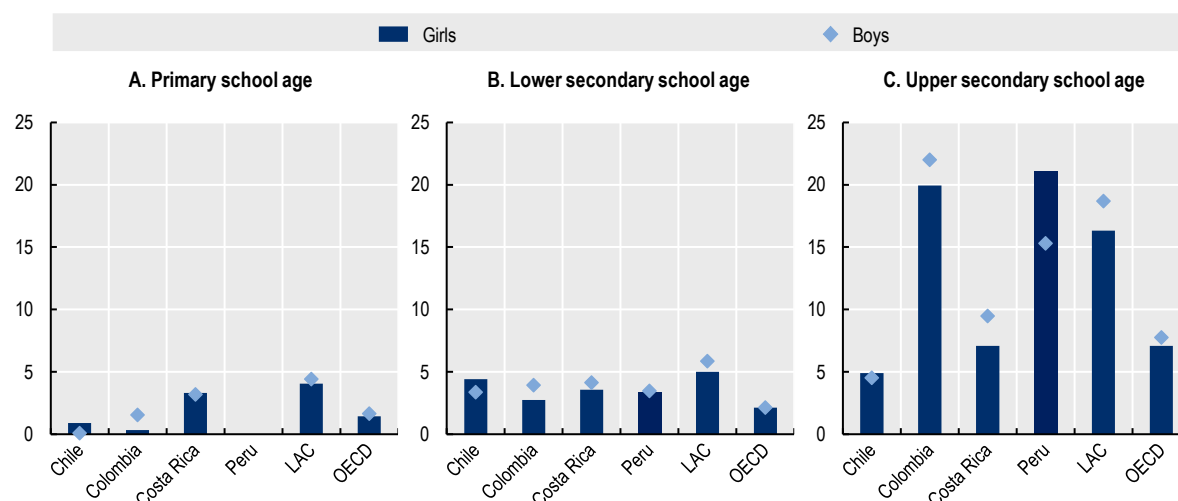
Key challenges, including low upper-secondary completion rates and high dropout rates, must be addressed. The COVID-19 pandemic worsened existing inequalities, and the growing demand for skilled workers due to digitalization heightens the urgency. Leaders in the region must prioritize equal distribution of high cognitive skills to stimulate growth.

Education is undeniably one of the key drivers of upward mobility but unequal access - because of socio-economic status and financial barriers - can undermine public efforts. The following section examines current trends in educational attainment across the region, followed by an analysis of the 2022 PISA results in Latin America and the Caribbean, highlighting variations by socio-economic background which is reflective of parental education. The chapter concludes with a comparative review of regional investment in education relative to OECD countries.

Latin America's educational attainment

In terms of educational attainment, Latin America and the Caribbean has experienced important progress. In primary education, most countries in the region have achieved universal coverage. The net enrolment rate - reflecting the proportion of students enrolled at the appropriate educational level for their age - for primary education in the region stands at 97.1%, similar to 98.9% in OECD member countries. However, 9.6 million children remained out of school in 2022 - surpassing the historical low of 2015 (UNESCO, 2024^[62]). More importantly, as Figure 3.1 indicates, the proportion of out-of-school children as a share the corresponding age group, increases with age (OECD, 2022^[63]).

Figure 3.1. Share of children/youth out of school, by educational level (%)



Note: 2019/2020 or latest available. Data are not available for Primary school age in Peru. The Latin American average refers to Argentina, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, Mexico, Paraguay, Peru, and Uruguay where available.

Source: Gender Equality in Peru: Towards a Better Sharing of Paid and Unpaid Work

Despite policy reforms aimed at increasing compulsory education duration, upper secondary education coverage in Latin America lags behind that of OECD countries (OECD, 2023^[64]). The net enrolment rate in the region is 78.14%, 14 percentage points lower than the OECD average of 92.8% (**See Figure 3.2**). In a same vein, completion rates for secondary education are 15 percentage points behind the OECD average, standing at 65% in Latin America compared to 80% in OECD countries (Arias Ortiz et al., 2024^[65]).

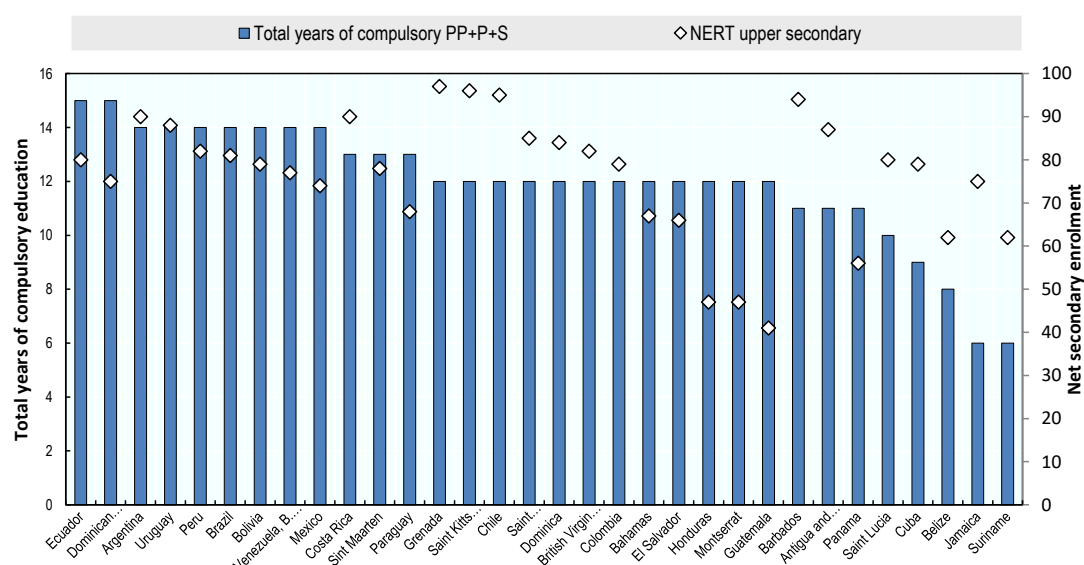
Worryingly, strides in educational attainment began decelerating before 2020. Experts note a decline in effective policies to reduce school dropout rates, which remain a significant challenge across Latin America and the Caribbean (ECLAC, UNESCO, UNICEF, 2024^[66]). This issue is particularly critical for social mobility, which is influenced by various interconnected factors such as income levels, rural residency, indigenous status, and more importantly, parental education (**See Figure 3.3**). Evidence from Argentina indicates that dropout rates are heightened by income shocks within households, with the impact being more pronounced in families with lower-educated earners and limited resources (OECD, 2017^[67]).

As a result, exclusion rates show a strong negative correlation with household income. Among those of upper-secondary school age, 17.7% of students living in extreme poverty in urban areas and 25.2% in rural areas are out of school. In contrast, only 3.2% of high-income students in urban areas and 14.8% in rural areas face similar exclusion (ECLAC, 2024^[55]).

Disparities within the education system manifest early, becoming particularly pronounced at the secondary level through dropout rates. When students leave the system, they forfeit the opportunity to pursue higher education, which exacerbates existing inequalities by limiting their job prospects. Those who do not complete secondary education are more likely to experience unemployment, live in poverty, and become single parents. At the aggregate level, dropout limits the skills of the country's workforce and the share of highly productive workers who would contribute more through tax revenues if they had completed secondary education (Lyche, 2010^[17]; OECD, 2017^[16]).

Given these impacts, policies aimed at reducing school dropout should be viewed as investments rather than expenses. Notably, dropout rates can often be predicted based on demographic characteristics and early warning signs, such as absenteeism and grade repetition, making preventive measures feasible.

Figure 3.2. Net enrolment rates in secondary education and length of compulsory education in LAC



Note: ISO3 country codes. Total years of compulsory education can include pre-primary education, as is the case in El Salvador. Countries ranked in descending order of total years of compulsory education.

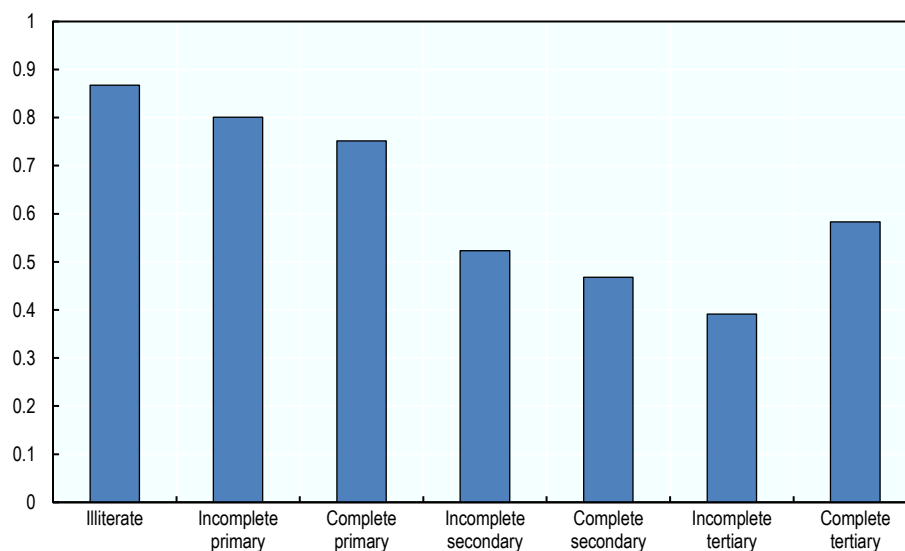
Source: (UNESCO, 2020), Global education monitoring report, 2020: Inclusion and education: all means all.

Countries in Latin America can promote inclusive growth by implementing policies to both prevent school dropouts and reintegrate children and youths who are already out of the system. Intuitively, these measures should vary according to educational level. At the primary education level, the focus should be on ensuring a smooth transition into the educational system by using pre-emptive measures such as involving parents, addressing problematic behaviour, and providing therapeutic programs. At the lower secondary level (the last two years of primary in systems that extend from first to eighth grade), it is essential to identify at-risk students to facilitate their transition to upper secondary education. This group often includes students who have repeated grades, with Latin America exhibiting some of the highest grade repetition rates in PISA assessments -over 40% of students in Colombia have reported repeating at least one grade. Research links grade repetition to school disengagement, contributing to increased dropout rates; thus, policymakers should consider strategies to reduce this practice.

Another relevant measure is introducing substance abuse topics at this age, which, despite not having a direct impact on school dropout, can help to create positive attitudes towards the school environment. Encouraging, volunteering, and fostering connections between schools and the workplace can help reduce dropout rates. At the upper-secondary level, ensuring completion becomes more challenging if these school years are not made mandatory. However, motivating underperforming students through engaging tasks and vocational training opportunities can improve graduation rates. (Lyche, 2010^[68]).

Following secondary education, tertiary education plays a crucial role in enhancing individuals' living conditions and acts as a powerful driver of social mobility. Additionally, the financial benefits of obtaining a tertiary degree remain robust in Latin America. Graduates enjoy enhanced job prospects and higher salaries, while at a broader level, increased educational attainment drives growth and productivity through a more skilled workforce (OECD, 2016^[18]; OECD/CAF/ECLAC, 2016^[19]).

Figure 3.3. Average probability of having achieved a higher level of education given parental education in Latin America, adults aged 24-44.



Note: The bars represent the estimated child's average probability of achieving a higher level of education than his/her parents' educational attainment, except for "complete tertiary" where it represents the probability of achieving the same level.

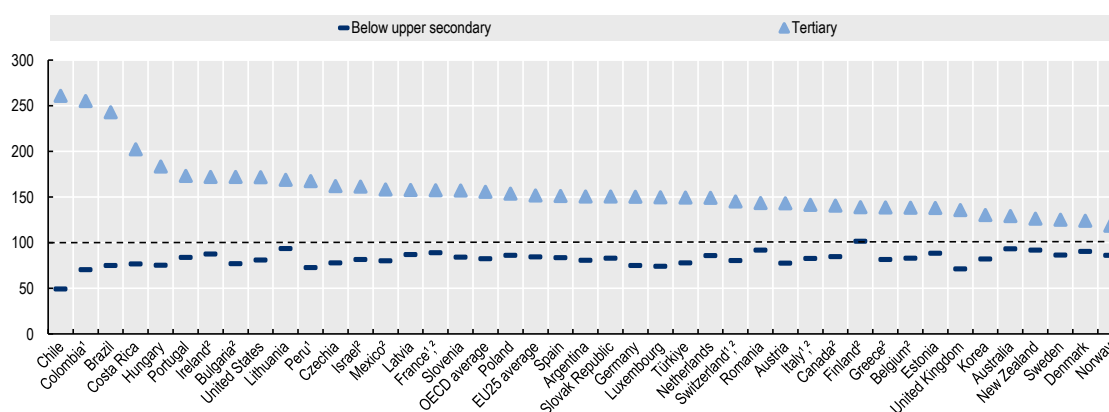
Latinobarómetro is a public opinion survey conducted annually, with approximately 20,000 interviews across 18 Latin American countries, representing over 600 million inhabitants.

The sample are people aged between 25 and 44 years at the time of the survey.

Source: Latinobarómetro 2023.

Figure 3.4. Relative earnings of workers compared to those with upper secondary attainment, by educational attainment (2022)

25-64 year-olds with income from employment (full-time full-year workers); upper secondary education = 100



Note: The statistical data for Israel are supplied by, and under the responsibility of, the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem, and Israeli settlements in the West Bank under the terms of international law.

There are cross-country differences in the inclusion/exclusion of zero and negative earners. See Definitions and Methodology sections for more information.

1. Index 100 refers to the combined ISCED levels 3 and 4 in the ISCED 2011 classification. See the Reader's Guide for the list of ISCED levels.

2. Year of reference differs from 2022. Refer to the source table for more details.

3. Earnings net of income tax for Türkiye and a combination of gross (self-employed) and net (employees) earnings for Argentina.

Source: OECD (2024), Table A4.1. For more information see Source section and Education at a Glance 2024 Sources, Methodologies and Technical Notes (<https://doi.org/10.1787/e7d20315-en>).

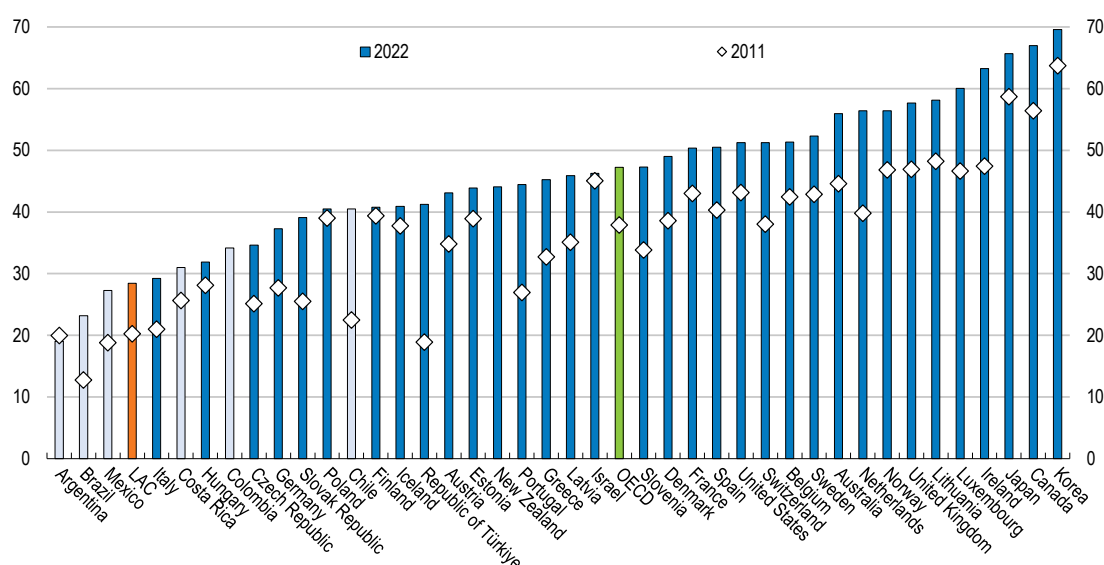
In Latin America and the Caribbean, the returns on higher education are notably high, largely due to a lower proportion of tertiary-educated adults compared to OECD countries. For instance, individuals with tertiary attainment earn 56% more than those with only upper secondary education in OECD nations. In countries such as Chile, Costa Rica, and Mexico, the wage disparities are even greater, with tertiary degree holders in Brazil, Chile, Colombia, and Costa Rica earning over twice the average salary of high school graduates (OECD, 2024^[69]).

This high return on investment in tertiary education can be attributed to the relative scarcity of graduates in the region. However, significant expansion has occurred over the past few decades, with gross enrolment rates - defined as the total number of students enrolled at this level relative to those in the five-year range following secondary education - more than doubling from 23% in 2000 to 52% in 2018. Nonetheless, this figure remains below the OECD average of 76% by over 20 percentage points (Valenzuela, 2022^[70]) (OECD, 2023^[71]).

Moreover, despite progress in gross enrolment, the measure should be interpreted with care as the metric includes both underage and overage students. Additionally, in Latin America, completion rates at this level are 25.1% compared to the OECD average of 40%, meaning that a considerable share of students enrolled in tertiary education will not complete it (Arias Ortiz et al., 2024^[65]). The share of adults (25-64-year-olds) with at least short-cycle tertiary education is 40% in OECD countries, while in countries like Chile (29%), Costa Rica (22%) and Mexico (21%), these proportions do not surpass 30% (**see Figure 3.5**) (OECD, 2022^[72]). Nevertheless, younger generations are more likely to have tertiary attainment (OECD, 2024^[73]).

Figure 3.5. Percentage of 25-34-year-olds with tertiary education as the highest level attained

2022 vs. 2011



Note: LAC countries in light blue. LAC average in orange and refers to Argentina, Brazil, Chile, and Costa Rica.
Source: Figure 4.4 OECD economic Surveys, Mexico

The significant wage premium in the region has the potential to enhance social mobility; however, access to tertiary education remains highly inequitable, particularly for low-income individuals, who are 20 percentage points less likely to enrol than their higher-income counterparts (Arias Ortiz et al., 2024^[65]). Moreover, when underprivileged students make it to higher education, they are less likely to complete the program and, if they do, they are more likely to have lower wages than their peers with highly educated parents (OECD, 2015^[74]) (OECD, 2010^[75]).

For tertiary education to effectively drive economic progress and social mobility, it must be high quality and accessible. Financial barriers must be addressed to increase participation from low- and middle-income sectors. Grants and student loans can play a vital role in this regard, as evidence suggests that universal financing improves success rates for these groups (OECD, 2010^[75]).

Unfortunately, the rapid expansion of tertiary education in Latin America has often compromised quality. Increased demand, particularly from less affluent sectors, has led to the proliferation of teaching-oriented institutions at the expense of research-focused ones, diminishing overall educational standards (Brunner, 2013^[76]). In an increasingly knowledge-based and digital economy, this poses an important restriction in terms of innovation, productivity, and inclusive economic growth.

Overall, while LAC countries have made important strides in educational attainment and coverage since the 2000s - especially achieving near-universal coverage in primary education - many challenges remain. Secondary education completion rates still lag behind those of OECD countries, with high dropout rates persisting, especially among students from disadvantaged backgrounds. This trend often leads to long-term negative impacts on employment opportunities, earnings, and the risk of poverty, as those who do not complete secondary education are less likely to pursue higher education. Despite the high private returns associated with higher education, particularly for bachelor's degree holders who can earn more than double their peer with just secondary education, access remains inequitable, and earnings are still heavily influenced by family background.

However, educational attainment is only a necessary and not a sufficient condition for achieving sustained and inclusive economic growth - as the level of skills acquired at the school and tertiary level will determine a worker's productivity and contribution capacity. In this regard, international assessments that measure students' cognitive skills across educational systems, such as the OECD's Programme for International Student Assessment, are essential to evaluate this aspect effectively.

Beyond attainment: Latin America's performance in PISA 2022

Box 3.1 Interpreting PISA scores and proficiency levels

Unlike physical units that have a substantive and universal meaning, PISA scores are established based on the range of results observed across all participants in each assessment. Results are standardized to approximate a normal distribution, meaning there are no strict theoretical minimums or maximums. As a result of the standardization, the average score is around 500 points, with a standard deviation of approximately 100.

Proficiency levels

The score scale can be categorized into proficiency levels, which for PISA 2022 spanned eight. An individual at a particular proficiency level can generally handle items at that level and below, but struggle with higher-level tasks. Each mathematics proficiency level spans approximately 62 score points, while reading and science proficiency levels differ by about 73 and 75 score points, respectively. Differences of these magnitudes will indicate different levels of skills and knowledge.

More importantly, Level 2 will be considered the minimum proficiency level across reading, mathematics, and science. In mathematics, students will accomplish high levels of proficiency if they understand mathematical problems and can formulate models to solve them, whereas reading proficiency is defined as "(...) understanding, using, evaluating, reflecting on, and engaging with texts in order to achieve one's goals, to develop one's knowledge and potential, and to participate in society." Finally, proficiency in science is the capability of engaging with the discipline as a reflective citizen (OECD, 2019^[77]).

Score differences

Differences of smaller magnitudes may or may not reflect variations in terms skills and knowledge. To compare these smaller differences, their statistical significance must be assessed, because PISA results are estimates derived from samples. This is why interpreting results across different assessment years must be done using "link errors" as the same score may not represent the same skills and knowledge across assessments.

Source: Box 1, (OECD, 2023^[57])

The Programme for International Student Assessment (PISA) is a triennial evaluation for 15-year-olds who are near the end of their compulsory education. It evaluates them on the areas of reading, mathematics, and science, with each assessment focusing on a particular domain (OECD, 2019^[78]). PISA does not just focus on whether students can reproduce knowledge, but whether they can apply it in unknown settings. The assessment also provides schools and policymakers with useful information that allows them to look at what others are doing around the world to improve their educational systems (OECD, 2023^[57]).

The most recent evaluation took place in 2022, with the core module being mathematics. It was the first assessment since the COVID-19 pandemic, during which Latin America experienced the world's longest school closures, with an average of 72 weeks (ECLAC, 2023^[58]). Despite the difficulties posed by the pandemic, PISA 2022 included data for 81 countries and economies, and almost 700,000 students, who represented 29 million students across all participating countries. Out of the total number of countries that participated, only 13 did not meet one or more sampling standards, but were still included considering the exceptional circumstances.

This version of PISA recorded participation from 14 Latin American and Caribbean (LAC) countries - of which 10 also participated in 2018 - totalling 95,000 students representing more than 6 million students in

the region. First time participants include El Salvador and Jamaica, while Guatemala and Paraguay joined after participating in the “PISA for Development” initiative (OECD, 2023^[79]). Only Jamaica and Panama did not meet all sampling requirements, so results from these countries should be interpreted with caution.

Overall, PISA 2022 revealed a significant decline in the performance of OECD countries in mathematics and reading, with scores dropping by 15 points and 10 points respectively, while science scores remained stable. Historically, the OECD average has fluctuated by no more than four points in mathematics or five points in reading between consecutive assessments, making these declines unprecedented. This drop suggests a widespread negative impact of school closures; however, it cannot be solely attributed to the pandemic, as declines in reading and science performance had been observed prior to it (OECD, 2023^[57]).

Mean scores in Latin America and the Caribbean

The results in Latin America and the Caribbean are notably lower compared to those of OECD countries. (**See Figure 3.6**). The regional mean performance in mathematics is below OECD levels, with 373 points compared to the OECD average of 472. Moreover, all Latin American OECD member countries - Chile, Colombia, Costa Rica, and Mexico - exhibit the lowest average performance within the OECD. The top performer among the OECD is Japan, with 536 points. The highest scores in Latin America were obtained by Chile (412), followed by Uruguay (409) and Mexico (395); while the countries with the lowest average scores were Paraguay (338), the Dominican Republic (339), and El Salvador (343).

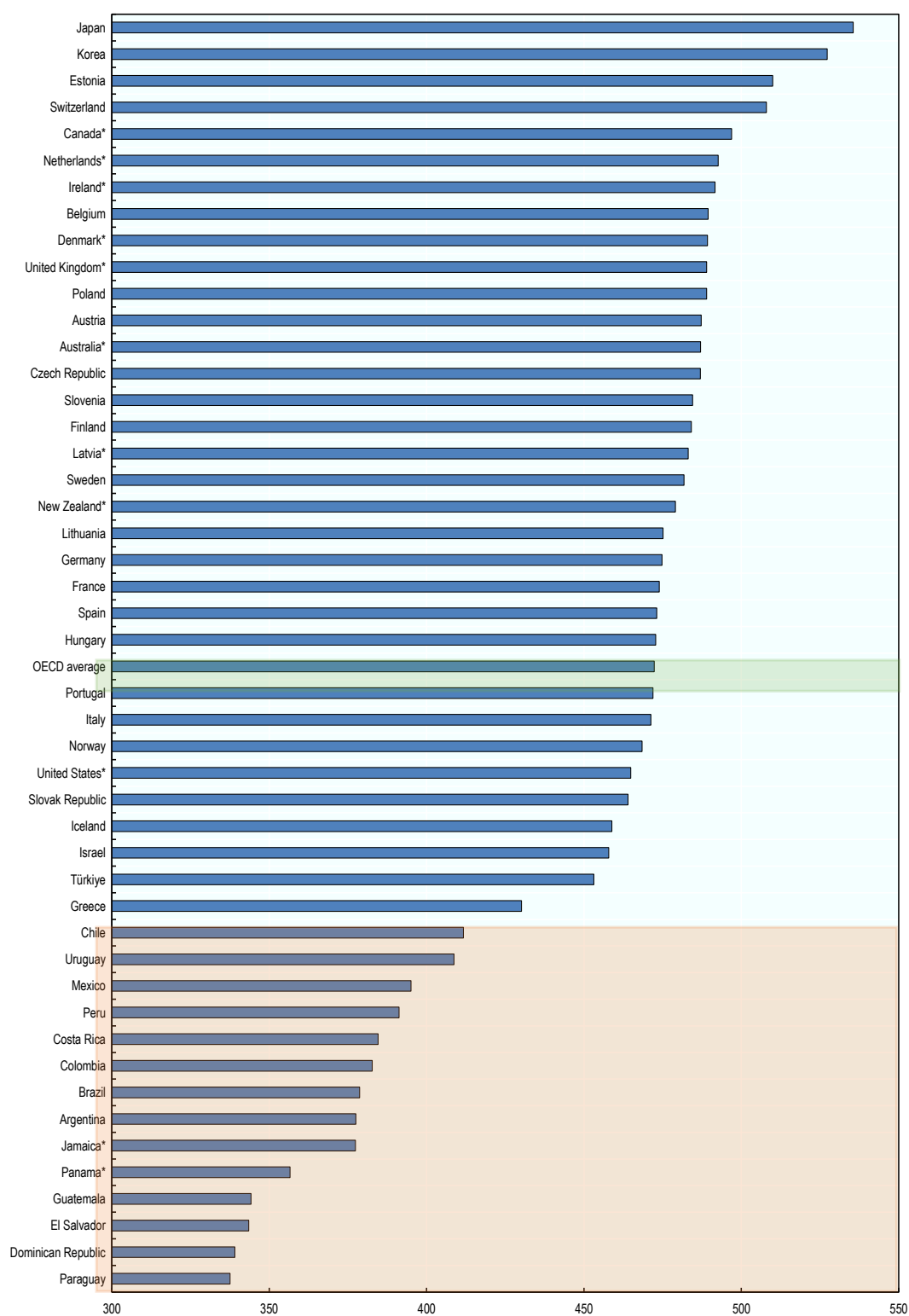
For reading, the participating Latin American and the Caribbean countries averaged a score of 404 points, compared to 476 in the OECD (**see Figure 3.7**). The top performer among OECD countries was Ireland, with 516 points.² The top LAC performers were Chile (448), Uruguay (430), and Mexico (415), with Chile scoring higher than Greece (438) and Iceland (436). Conversely, the LAC countries with the lowest mean scores were the Dominican Republic (351), El Salvador (365), and Paraguay (373).

In science, the LAC average was 400 points, whereas OECD countries average was 485 (**see Figure 3.8**). For the OECD, the top performer was Japan, with a mean score of 547 points. In LAC countries, the top performers were Chile (444), followed by Uruguay (435) and Colombia (411). The Chilean results, while low, were similar to those of Iceland (447) and Greece (441). The LAC countries with the lowest average scores are the Dominican Republic (360), Paraguay (368), and Guatemala (373).

The differences in performance observed between the top-performing OECD countries and those in the LAC region highlight the significant challenges faced by Latin America and the Caribbean in improving the quality of their educational systems. Given the strong correlation between PISA performance and both tertiary education enrolment and employment likelihood, the results from PISA 2022 serve as a crucial call to action for LAC countries.

² Country did not meet all the sampling standards; therefore, results should be interpreted with care.

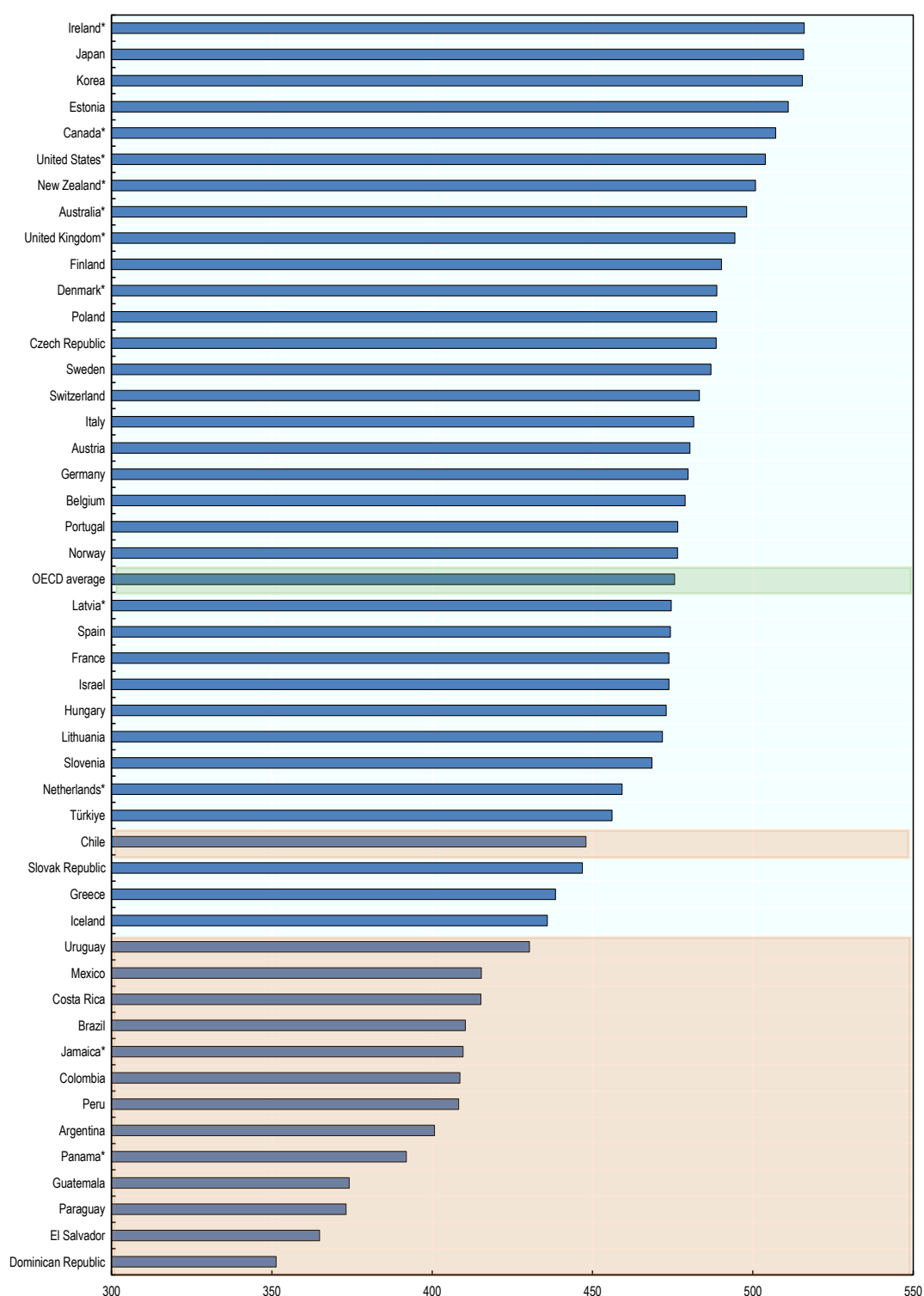
Figure 3.6. Mean mathematics PISA 2022 scores, by country (LAC and OECD)



Note: OECD average considers Chile, Colombia, Costa Rica, and Mexico. LAC countries highlighted in orange.

Source: Table I.B1.2.1 PISA Results 2022 Vol. I

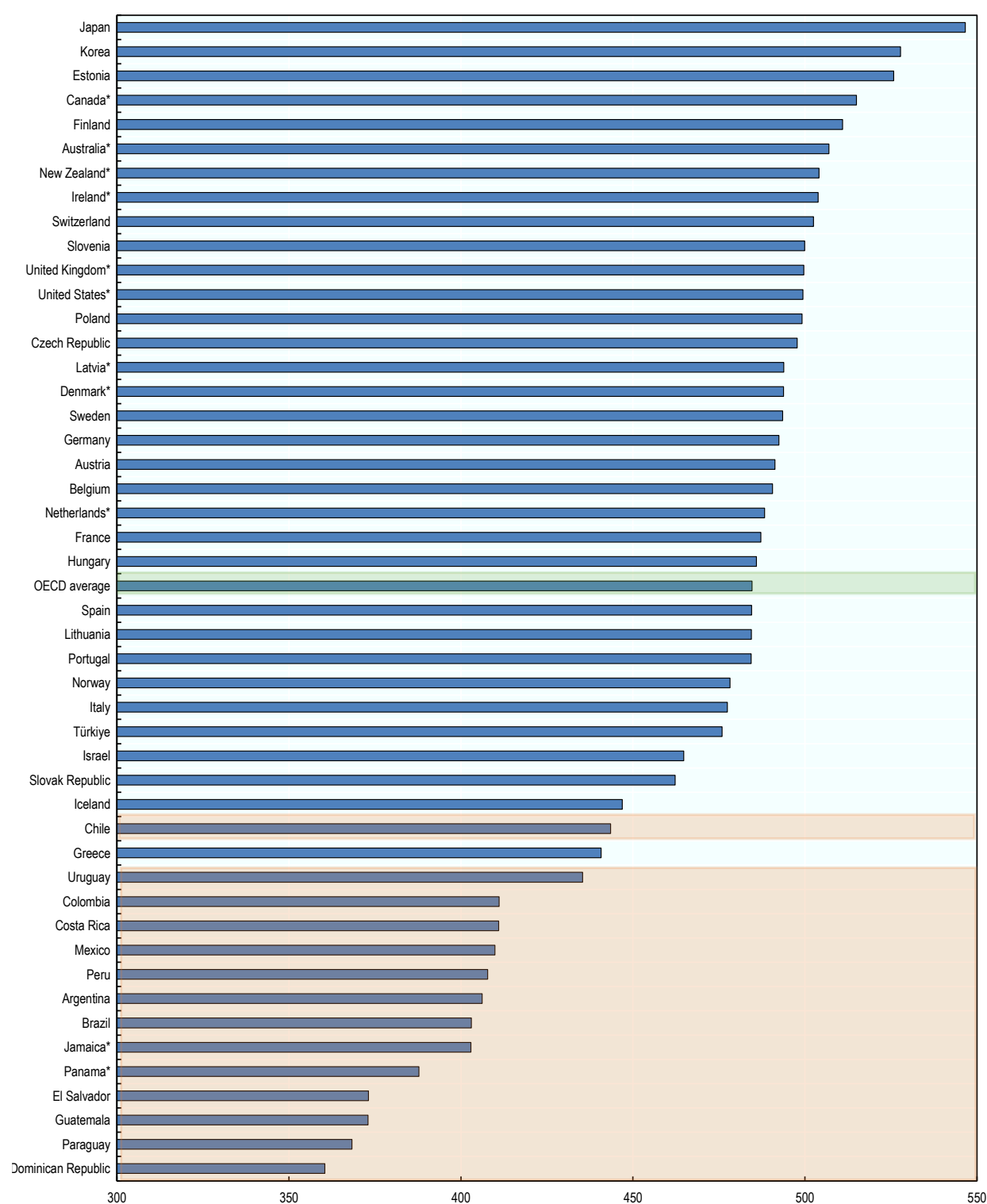
Figure 3.7. Mean reading PISA 2022 scores, by country (LAC and OECD countries)



Note: OECD average considers Chile, Colombia, Costa Rica, and Mexico. LAC countries highlighted in orange.

Source: PISA 2022 Results (Volume I): The State of Learning and Equity in Education

Figure 3.8. Mean science PISA 2022 scores, by country (LAC and OECD countries)



Note: OECD average considers Chile, Colombia, Costa Rica, and Mexico. LAC countries highlighted in orange.

Source: Table I.B1.2.3 PISA 2022 Results (Volume I): The State of Learning and Equity in Education

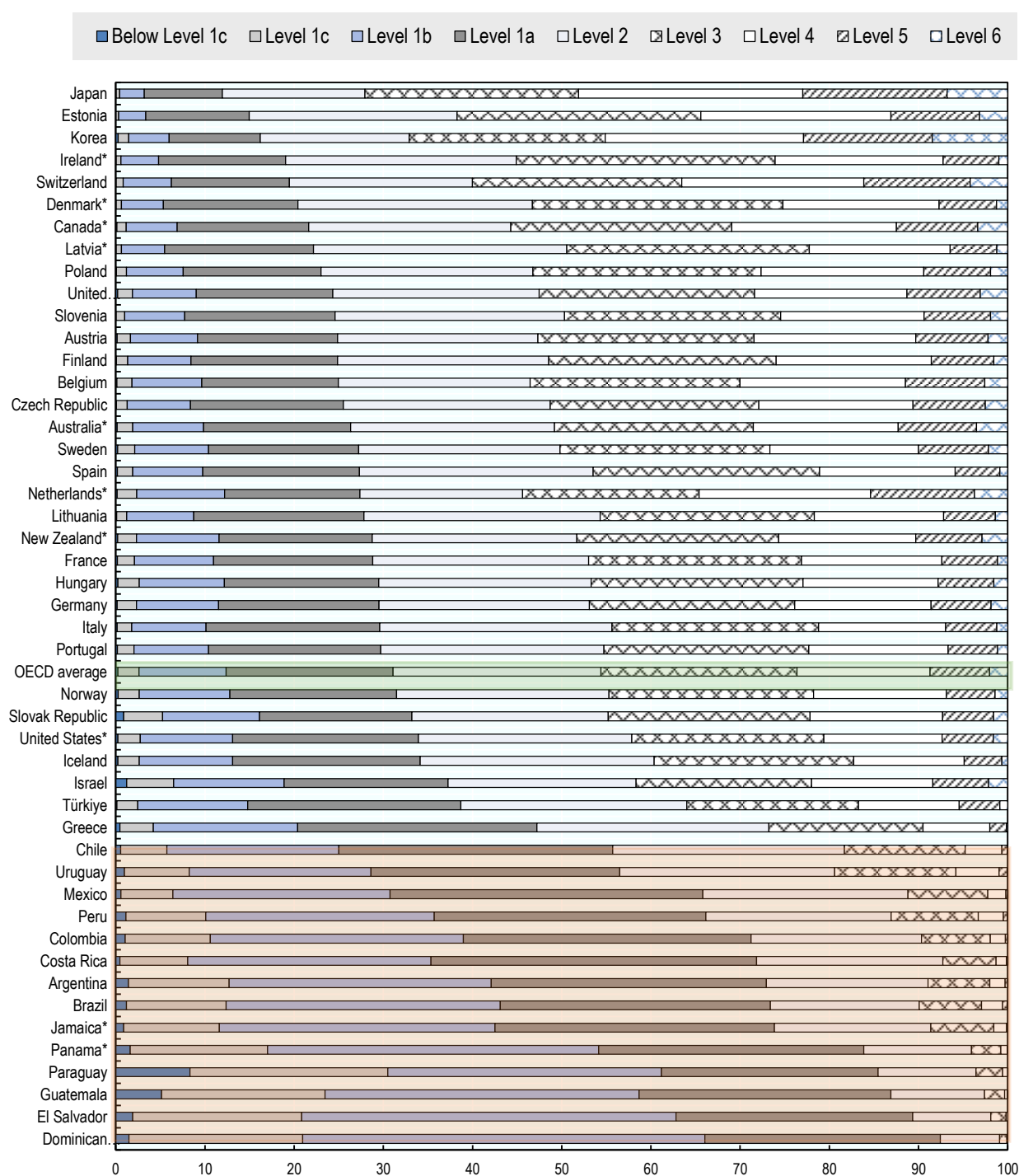
Proficiency levels in Latin America and the Caribbean

In terms of proficiency levels, Level 2 is considered the minimum proficiency level. In mathematics, three out of four LAC students underperform - meaning that they perform below Level 2 - compared to less than one in three (32%) at the OECD (**See Figure 3.9**). The OECD country with the highest proportion of students in level 2 or above in mathematics is Japan, where almost 9 out of 10 students (88%) obtain scores above Level 2. In LAC, the countries with the highest proportion of students achieving basic proficiency (2 and above) are Chile (44%), Uruguay (43%), and Mexico (34%). On the contrary, the countries with the lowest share of students performing at baseline proficient level in the region are the Dominican Republic (8%), El Salvador (11%), and Guatemala (13%).

Across the fourteen Latin American countries that participated in PISA 2022, more than half (55%) of students do not reach basic proficiency in reading (or a score that situates them at Level 2 or higher), compared to only 1 in 4 (25%) in OECD countries (**See Figure 3.10**). The OECD country with the highest share of students achieving baseline proficiency (level 2 and above) in reading is Ireland with 89%; whereas, in LAC, Chile leads with 66%, followed by Uruguay with 59%, Mexico with 53% and, finally, Costa Rica with 52%. Among the countries with the lowest shares of students scoring at level 2 or higher, the Dominican Republic has only 24%, followed by El Salvador at 28% and Guatemala at 32%. Notably, reading is the area in which the region demonstrates its strongest performance.

In science, less than 1 in 5 (17%) students in Latin America score at, or above, Level 2 compared to 1 in 2 in OECD countries (**see Figure 3.11**). Japan has the highest share of students performing at Level 2 or higher (75%), whereas in LAC, Chile (30%), Uruguay (30%), and Colombia (20%) have the highest shares. In contrast, the Dominican Republic (5%), Guatemala (5%), and Paraguay (7%) have the lowest shares of students scoring at Level 2 or above.

Figure 3.9. Share of students in each proficiency level in mathematics, by country (LAC and OECD)

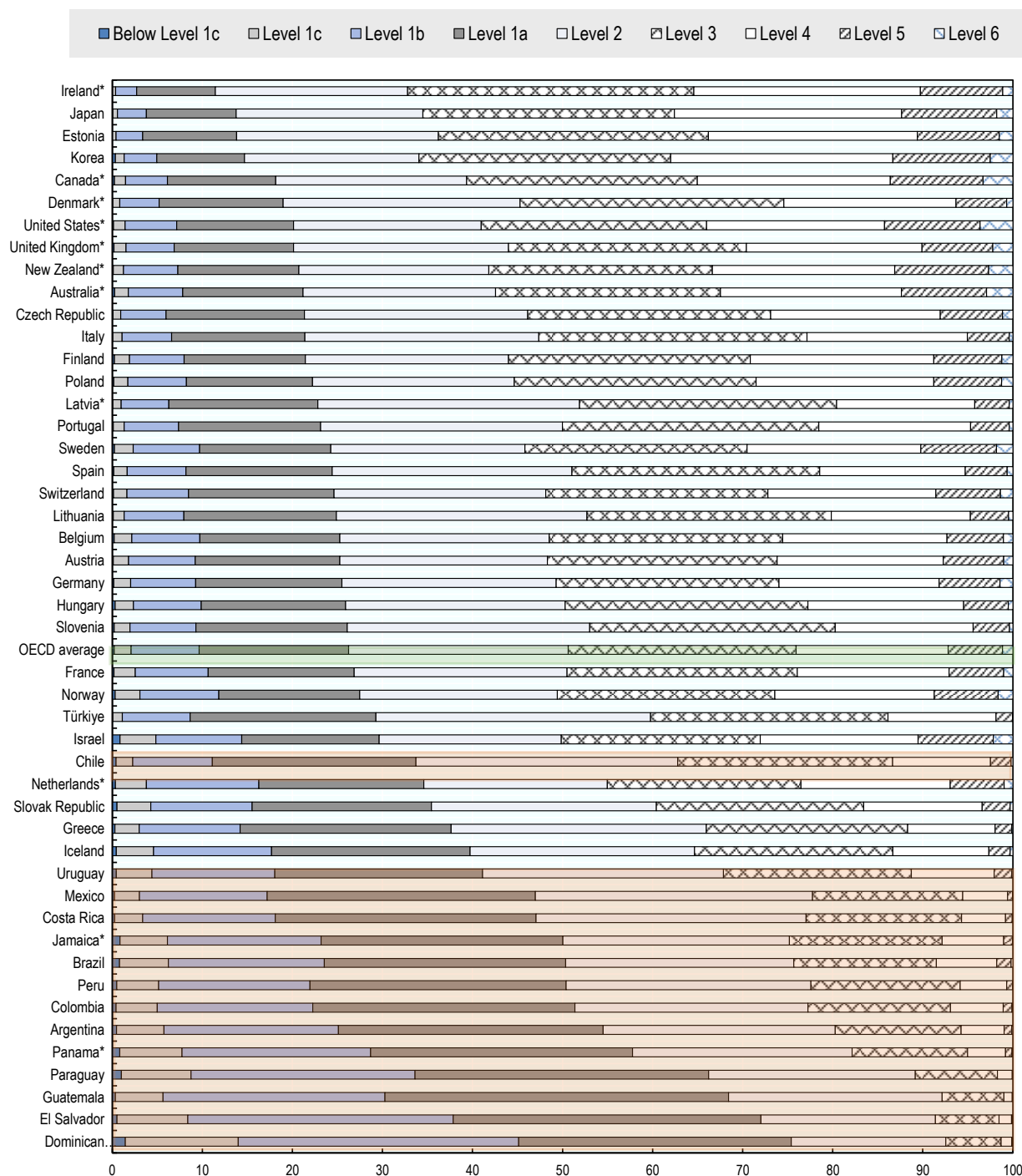


Note: OECD average considers Chile, Colombia, Costa Rica, and Mexico. LAC countries highlighted in orange.

Countries are ranked in descending order of proficient students (Level 2 and up).

Source: Table I.B1.3.1 PISA 2022 Results, Vol I

Figure 3.10. Share of students in each proficiency level in reading, by country (LAC and OECD countries)

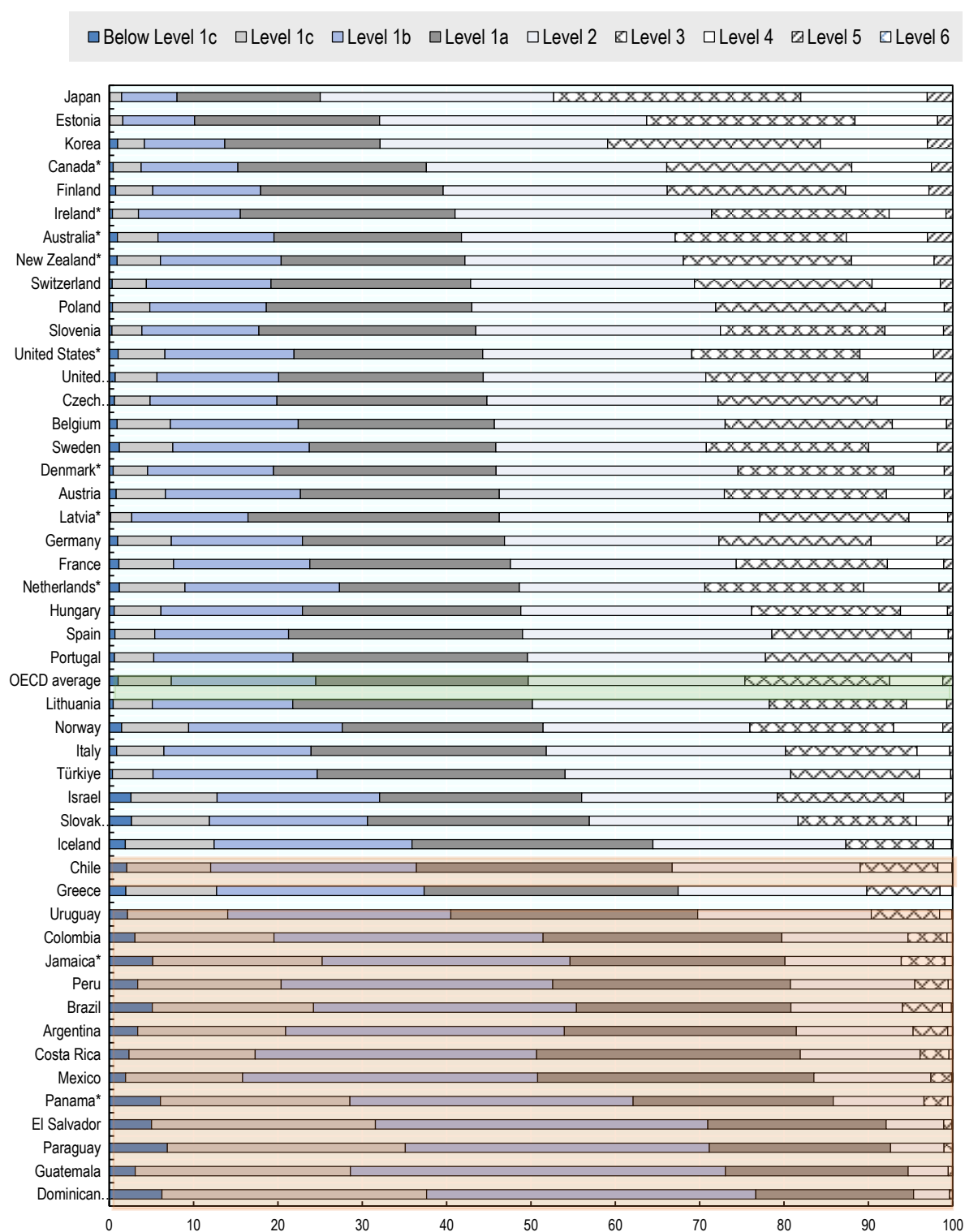


Note: OECD average considers Chile, Colombia, Costa Rica, and Mexico. LAC countries highlighted in orange.

Countries are ranked in descending order of proficient students (Level 2 and up).

Source: Table I.B1.3.2 PISA 2022 Results (Volume I): The State of Learning and Equity in Education

Figure 3.11. Share of students in each proficiency level in science, by country (LAC and OECD)



Note: OECD average considers Chile, Colombia, Costa Rica, and Mexico. LAC countries highlighted in orange. Countries are ranked in descending order of proficient students (Level 2 and up).

Source: Table I.B1.3.3 PISA 2022 Results (Volume I): The State of Learning and Equity in Education

Inequalities in student performance in Latin America based on socio-economic status

Box 3.2. Socio-economic status in the context of PISA

Socio-economic status encompasses a wide range of factors that reflect students' access to familial resources such as economic, social, and cultural capital, as well as their family's social standing. In the PISA context, this status is quantified using the PISA index of economic, social, and cultural status (ESCS).

A higher ESCS score indicates a higher socio-economic status, with the index centred around a mean of 0 and a standard deviation of 1 among OECD countries. The ESCS is a composite measure derived from three indicators: the highest educational attainment of the parents, the highest occupational status of the parents, and household possessions. These indicators are collected from each student via a questionnaire completed after the PISA cognitive tests.

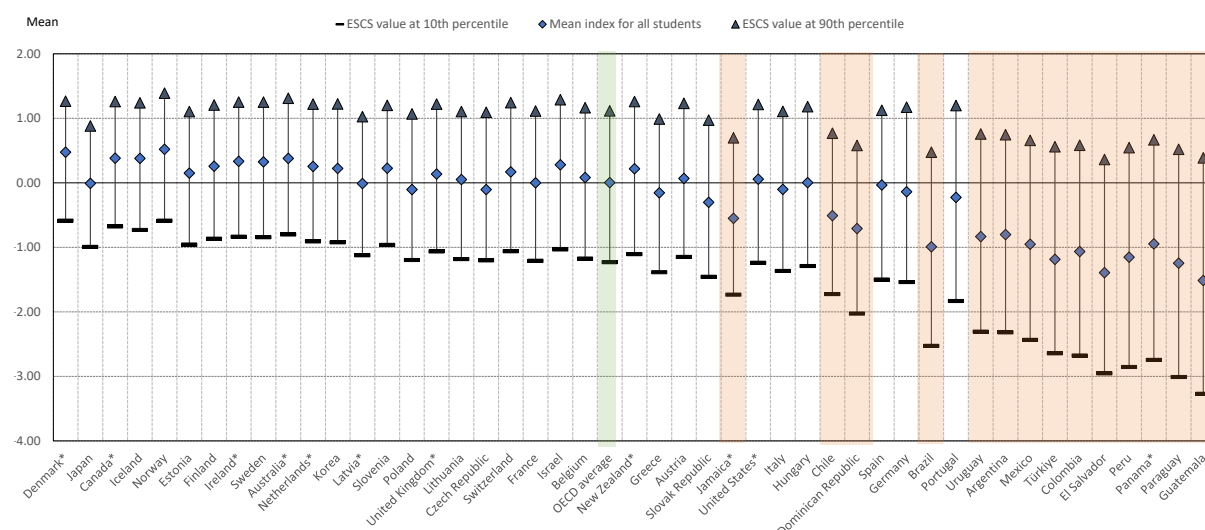
Source: Box I.4.1, (OECD, 2023^[57])

In PISA, a student's socio-economic status is estimated by the index of economic, social, and cultural status - the ESCS index - a composite measure that combines into a single score the financial, social, cultural, and human capital resources available to students. Information about these three components for each student was collected through the student questionnaire, a survey that students answered after completing the PISA cognitive assessment

The socio-economic status of students varies between countries/economies but in the vast majority of cases, differences in socio-economic status, which may be seen as a proxy of the socio-economic inequalities in the countries, are larger within than between countries/economies. Comparing the ESCS value at the top and bottom 10% of the index distribution shows wider socio-economic differences in Latin America and the Caribbean as compared to OECD countries. The most pronounced differences are found in Guatemala, Paraguay, and Panama, while Jamaica, Chile, and the Dominican Republic exhibit the smallest gaps. Nonetheless, all participating LAC countries demonstrate a more significant disparity between the top and bottom 10% than the OECD average (see Figure 3.12).

Figure 3.12. PISA ESCS index difference between the top and bottom 10%

LAC and OECD countries



Note: Only countries with available data are shown. LAC countries highlighted in orange.

All differences between the 90th and the 10th percentiles are statistically significant (see PISA Results Volume I Annex A3).

Countries ranked in ascending order of the ESCS difference between the top and bottom 10%.

Source: OECD, PISA 2022 Database, Table I.B1.4.2.

While the ESCS index offers a proxy for students' access to family resources within their country or economy, the socio-economic gradient in PISA assesses the relationship between students' socio-economic status and academic performance. The strength of the gradient is measured by the proportion of the variation in student performance that is accounted for by differences in student socio-economic status. When the relationship between socio-economic status and performance is strong, socio-economic status predicts performance well. In other words, a strong relationship between socio-economic status and performance in PISA may indicate low social mobility or less fairness within the country/economy (Willms, 2006^[80]).

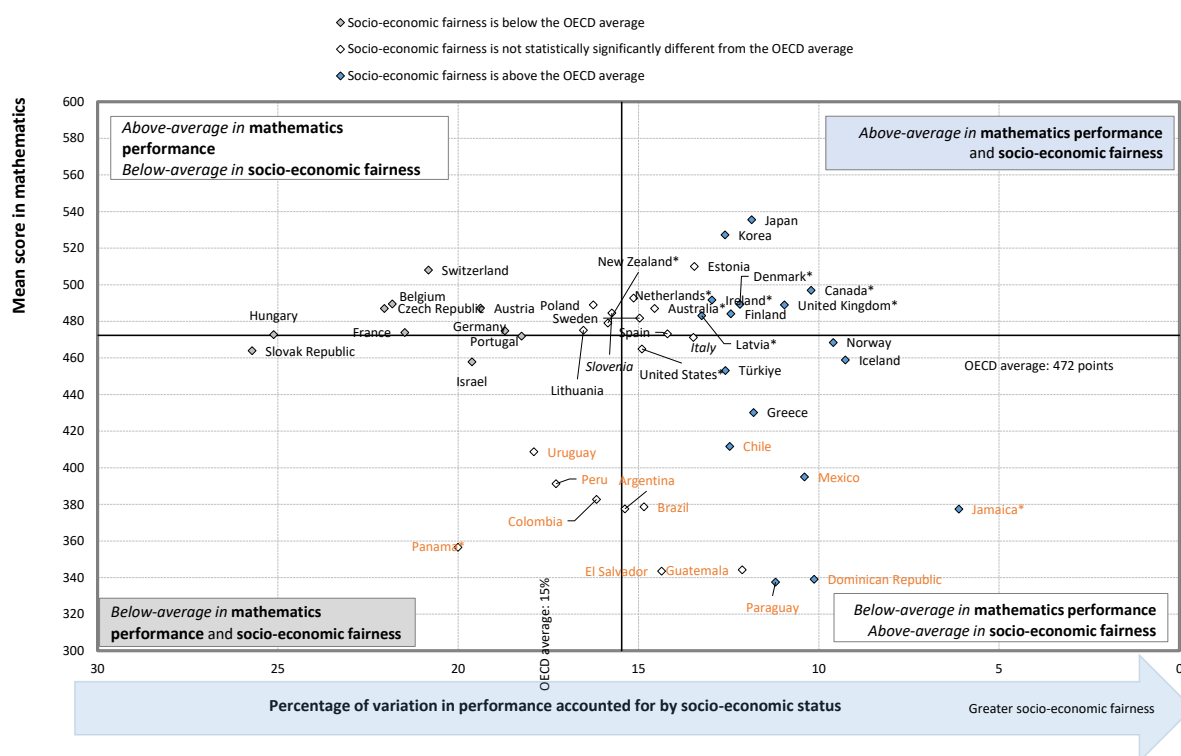
Given the high-income inequality in the region, and the stark differences between advantaged and disadvantaged students based on the ESCS index, one might expect a strong socio-economic gradient in Latin America and the Caribbean (LAC). However, data from Figure 3.13 shows that LAC countries demonstrate levels of fairness comparable to, or better than, OECD countries. Chile, the Dominican Republic, Jamaica, Mexico, and Paraguay exhibit significantly higher fairness levels than the OECD average, while other LAC countries with available socio-economic data are not statistically different from the OECD average. However, all LAC countries perform below the OECD average in mathematics.

This is further reflected in the share of resilient students - those in the bottom quartile of the ESCS index but performing in the top quartile academically. The proportion of resilient students varies across Latin America, ranging from 7.4% in Peru to 15.2% in Jamaica, with the latter exhibiting one of the highest shares of resilient students in PISA 2022. Higher levels of resilience correlate with greater educational equity, inclusive systems and, therefore, promote social mobility (OECD, 2016^[81]).

Unlike other metrics, the region shows diversity in terms of the rate of resilient students, with some Latin American and Caribbean countries even outperforming the OECD average in terms of resilient students, particularly in mathematics (see Figure 3.14). However, when interpreting these results related to a lower socio-economic gradient and a higher share of resilient students in some of the LAC countries, a key piece

of information is necessary: the average differences in performance between the most advantaged and disadvantaged groups.

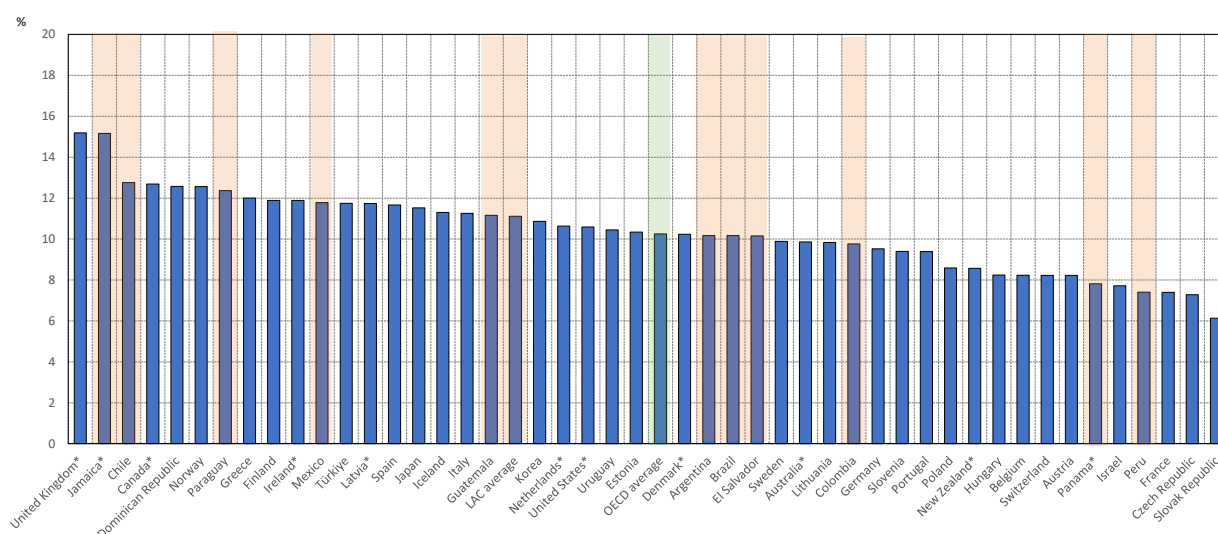
Figure 3.13. Strength of socio-economic gradient and mathematics performance



Note: Only countries with available data are shown. LAC countries highlighted in orange.

Source: PISA 2022 Database, Tables I.B1.2.1 and I.B1.4.3.

Figure 3.14. Resilient students in mathematics, by country (%)



Note: Only countries with available data are shown. LAC countries highlighted in orange.

Percentage of socio-economically disadvantaged students who scored in the top quarter of mathematics performance in their own country.

Countries ranked in descending order of share of resilient students.

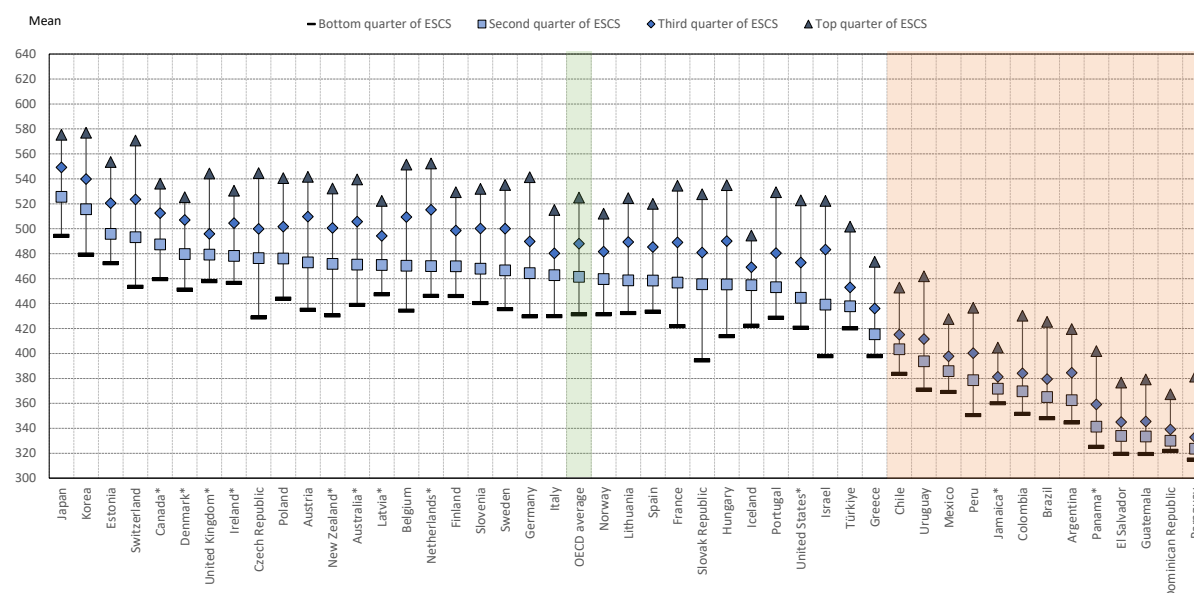
LAC average calculated as a simple average.

Source: PISA 2022 Database, Table I.B1.4.3.

All assessed countries demonstrate a significant performance gap in terms of PISA scores based on socio-economic status, as measured by the ESCS index. This suggests intergenerational transmission of privilege, as the ESCS combines parents' education level, occupational status, and household assets (a proxy for wealth) into a single measure. In other words, differences in educational outcomes of advantaged and disadvantaged students may reflect the influence of parental education and financial resources. Students from advantaged backgrounds tend to perform better academically due to greater access to resources, unlike those from families with lower educational attainment, unemployment, or poverty.

On average, OECD countries exhibit a 93-point gap between students in the top and bottom ESCS quartiles, whereas in Latin America, the difference is 68 points (**see Figure 3.15**). Those in the top 25% in OECD countries score on average 525 points in the mathematics assessment, compared to the mean score of 432 for the bottom quartile. In Latin America, the top quartile achieves an average score of 412 points, with the bottom quartile averaging just 344 points. Worryingly, those in the top 25% in Latin America and the Caribbean in terms of performance have lower scores, on average, than those at the bottom 25% in OECD countries. Rather than indicating greater fairness, this narrower performance gap in the LAC may reflect underachievement among the more advantaged students.

Figure 3.15. Mean performance in mathematics, by country and national quartile of socio-economic status (ESCS Index)



Note: Only countries and economies with available data are shown. LAC countries highlighted in orange.

Countries and economies are ranked in descending order of mathematics performance for students in the second quarter of national socio-economic status.

LAC average calculated as a simple average.

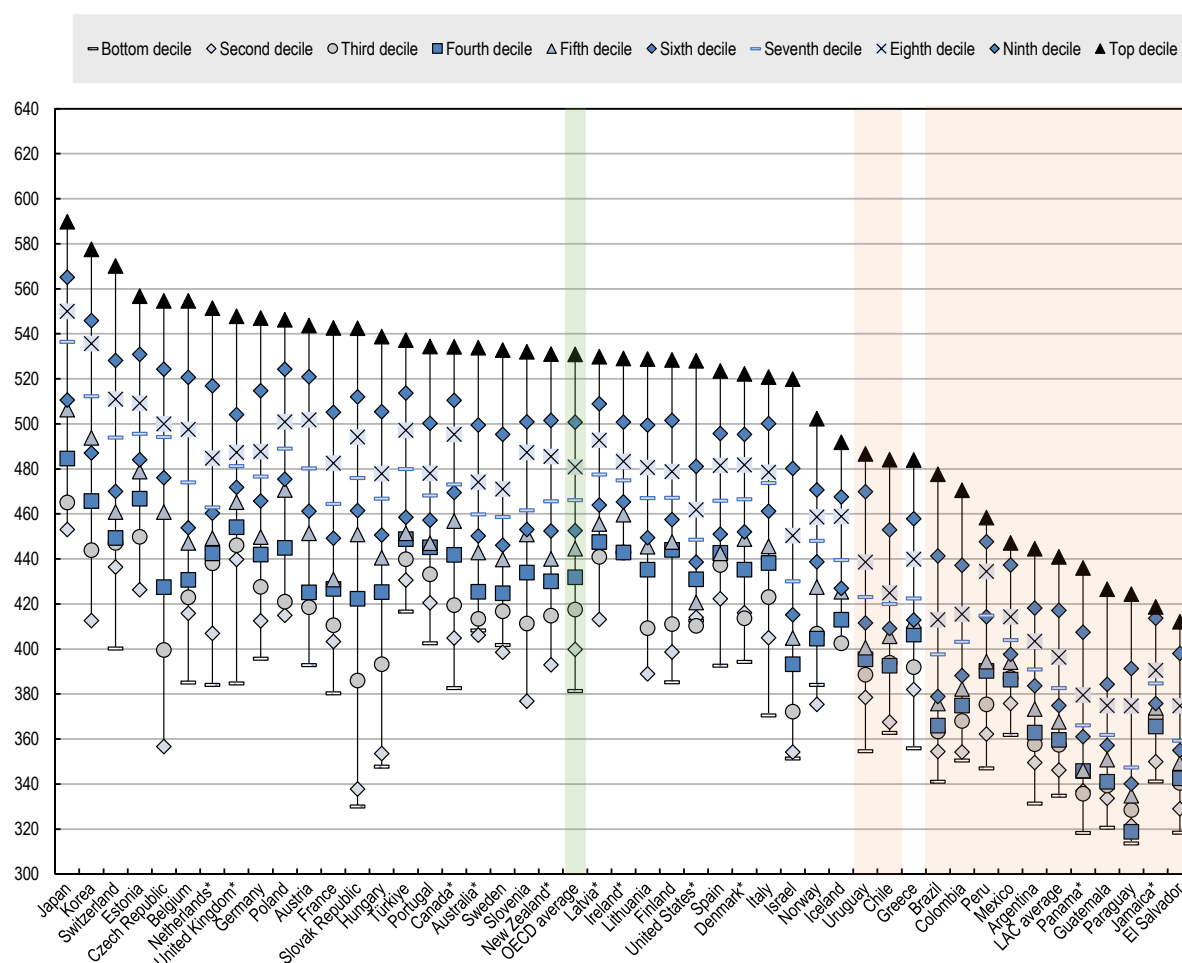
Source: OECD, PISA 2022 Database, Table I.B1.4.3.

To further explore this, it is essential to compare the top and bottom 10% of students by socio-economic status at the international level. In OECD countries, the performance gap between these groups is 144 points, compared to 107 points in Latin America (**see Figure 3.16**).

In LAC, the top 10% of students in terms of the ESCS index displays an average of 444 points in mathematics, while the bottom 10% reaches a mean score of 337 points. Differences between both groups are significant for all countries and range between 77 points in Jamaica³ to 137 points in Brazil.

³ Country did not meet all the sampling criteria; therefore, results should be interpreted cautiously.

Figure 3.16. Mean performance in mathematics, by international decile of socio-economic status



Note: Only countries with available data (Costa Rica excluded in LAC).

Countries are ranked in descending order by tenth decile performance.

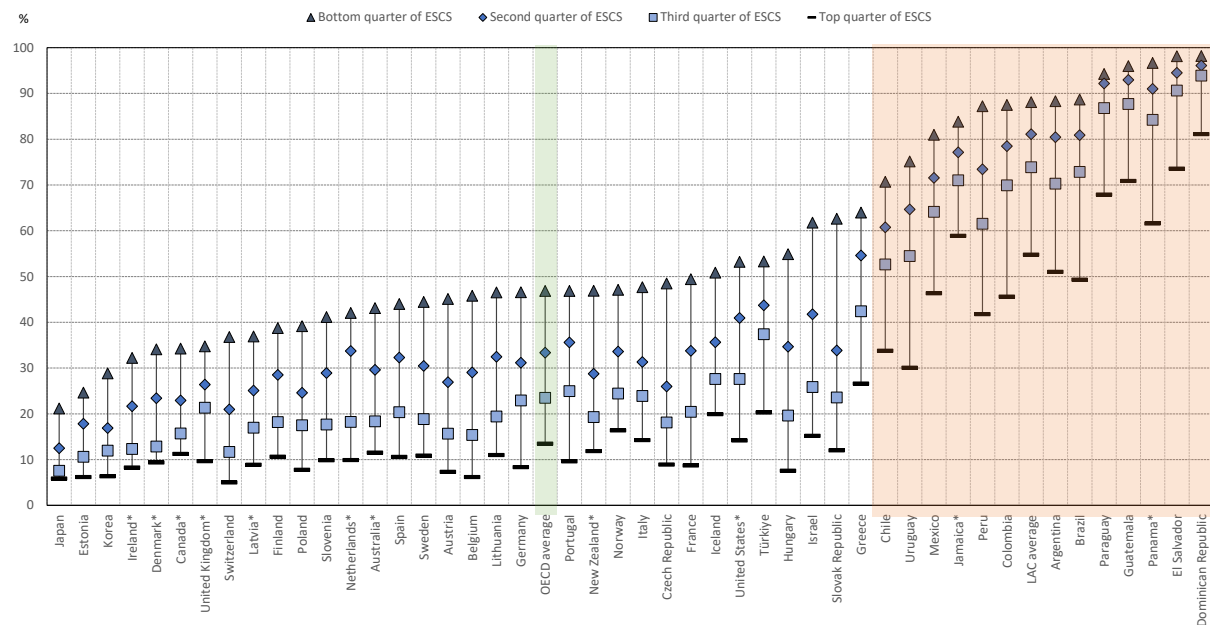
Source: OECD PISA 2022 Database, Tables I.B1.4.7 and I.B1.4.11

The share of underperforming disadvantaged students is also concerning. On average, 88% of disadvantaged students - defined as those in the national bottom quartile of the ESCS index - in the LAC region underperform in mathematics, compared to 47% in OECD countries. In four countries in the region, i.e., the Dominican Republic, El Salvador, Guatemala, and Panama, 90% or more of disadvantaged students lack basic math skills (**see Figure 3.17**). At the lower end, Chile and Uruguay have the smallest share of underperformers in the bottom socio-economic quartile, though the rates are still high at 71% and 75%, respectively. In contrast, Japan leads the OECD with only 21% of disadvantaged students underperforming.

Shifting the focus to the top quartile, in OECD countries, only 13.5% of socio-economically advantaged students underperform in mathematics, compared to 57% in LAC. For the former, the country with the highest share of underperformers in the top ESCS quartile is Greece with 26%; while, in LAC, El Salvador, Guatemala, and the Dominican Republic have the highest shares of advantaged underperformers, with 71%, 74% and 81%, respectively. Uruguay, with 30%, fares best in Latin America and the Caribbean but

still lags far behind the OECD's top performers like Switzerland, Japan, and Estonia, which have the lowest shares of advantaged underperformers at just around 5%.

Figure 3.17. Low performers in mathematics, by socio-economic status (national quarters of ESCS index)



Note: Only countries and economies with available data are shown. LAC countries highlighted in orange.

Countries and economies are ranked in ascending order of the share of low performers in mathematics among students in the bottom quarter of the ESCS index.

Source: OECD, PISA 2022 Database, Table I.B1.4.14.

Most of the students in the region underperform in mathematics, regardless of socio-economic status. Furthermore, even those at the top of the income distribution do not show high levels of proficiency, indicating that the region's educational quality is lagging behind OECD standards. Measures of fairness in the education system, such as the share of resilient students, offer a glimpse of hope for the region. But while a weak association between student socio-economic status and performance within countries/economies is necessary for achieving fairness in education, it is not, of itself, a sufficient condition. It is also important to consider fairness in terms of education systems' overall levels of performance. The challenge in LAC countries is the coexistence of high levels of fairness in terms of student socio-economic status with low mean performance – indicating poor achievement across the board regardless of students' socio-economic status. This should not be taken as a desirable outcome. Therefore, many of the region's positive outcomes related to socio-economic disparities, such as the socio-economic gradient - which is the proportion of performance explained by socio-economic background - are largely explained by the underperformance of students at the top of the distribution, rather than strong performance by those at the bottom.

If even socio-economically advantaged students with greater access to resources perform at basic proficiency levels, the region will struggle to develop a highly skilled and productive workforce, which is crucial for long-term growth and well-being. This widespread low performance calls for universal policies to raise the educational outcomes of all students.

Investment in education

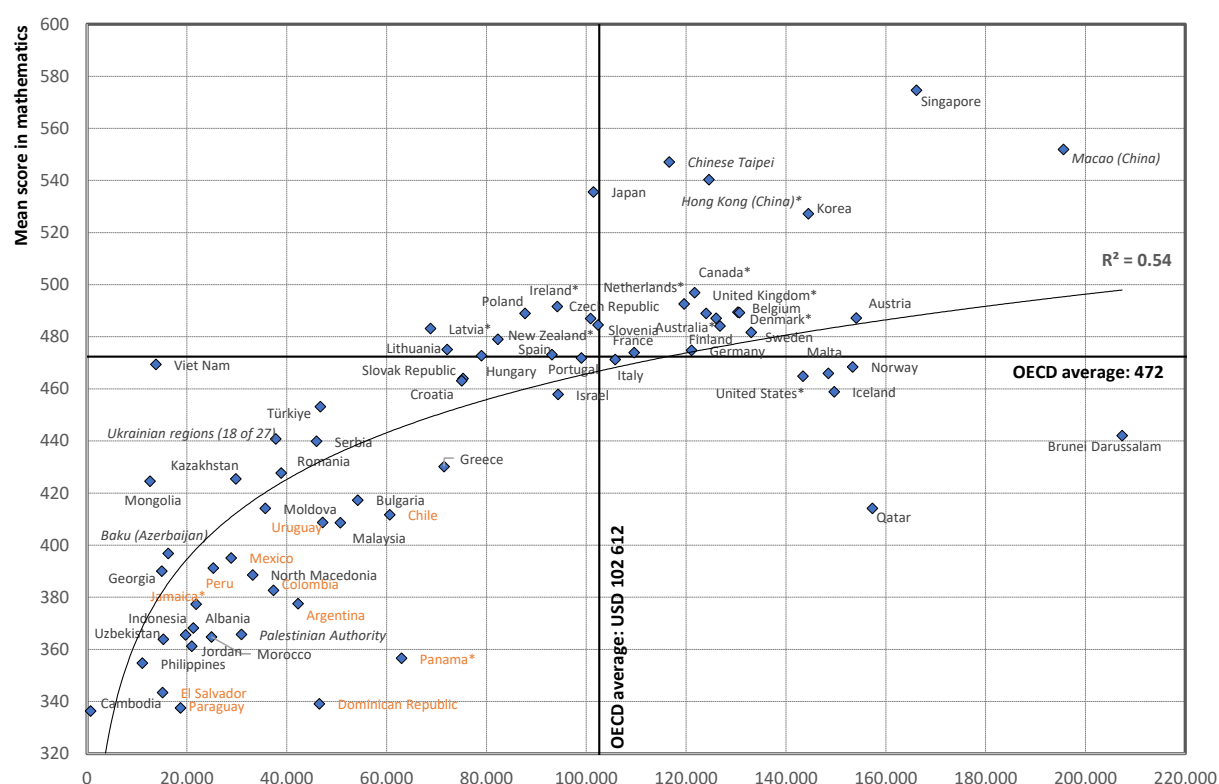
As spending per student on education increases, so does a country's mean performance in PISA. When examining the cumulative spending per student, it is possible to establish a significant and positive correlation between spending and performance. However, this relationship holds only up to a cumulative spending threshold of USD 75,000, beyond which per-student spending and performance begin to diverge (OECD, 2023^[57]).

This analysis is particularly relevant to Latin America and the Caribbean on two accounts (**see Figure 3.18**). First, none of the countries in the region have surpassed this spending threshold, leaving room for improvement through increased investment - Panama, the highest spender, reaches USD 62,000 per student. Second, at similar levels of spending, some countries outside the region, such as Vietnam, Turkey, and Serbia, outperform LAC nations. For instance, Vietnam outperforms the region's countries despite comparable spending levels.

Top-performing economies in PISA 2022 also vary widely in their spending per student. Japan, the highest-performing OECD country in mathematics, spends more than the USD 75,000 threshold but below the OECD average. Korea, on the other hand, spends significantly more than Japan without achieving better results. This highlights that both the amount of spending and how funds are allocated are critical to improving student outcomes.

Given that once cumulative spending per student exceeds the threshold it is difficult to reduce, policymakers should carefully consider resource allocation. For example, in high-performing countries like Korea and Hong Kong-China, significant investments are made in teachers. Lower secondary teachers in these countries earn more than double the average salary to attract top talent to the profession. This emphasis on quality teaching may be a key factor in their success (OECD, 2012^[82]).

Figure 3.18. Mathematics performance and spending on education, by country (All PISA countries)



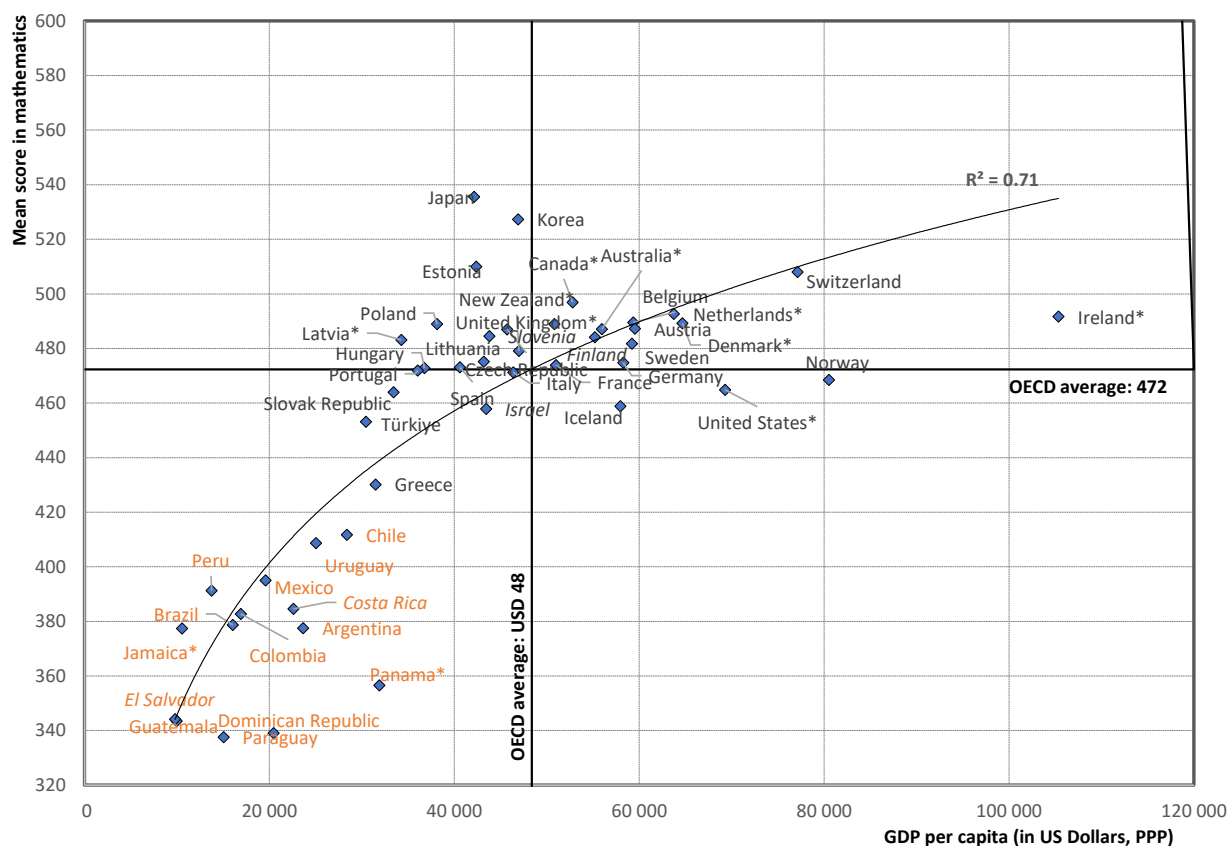
Note: Only countries and economies with available data are shown. LAC countries highlighted in orange.

Source: OECD, PISA 2022 Database, Tables I.B1.2.1 and I.B3.2.2.

Additionally, PISA 2022 data confirms that higher mean country performance in mathematics is associated with elevated GDP per capita levels (see Figure 3.19). As noted earlier, there is evidence linking PISA results to adulthood well-being indicators, such as employment probability and the likelihood of attaining a tertiary degree by age 25.

At the aggregate level, it is estimated that increasing PISA scores by 25 points over two decades could result in an economic gain of USD 115 trillion in OECD countries, attributed to enhanced lifetime earnings (OECD, 2019^[59]). Given that all countries in Latin America and the Caribbean have significant proportions of low-performing students regardless of socio-economic status, there is substantial potential for these nations to benefit from further and more efficient investments in education.

Figure 3.19. Mathematics performance and per capita GDP, by country (LAC and OECD countries)



Note: LAC countries highlighted in orange.

Source: OECD, PISA 2022 Database, Tables I.B1.2.1 and I.B3.2.1.

Conclusions

For education systems in Latin America and the Caribbean to produce a skilled and productive workforce that propels social mobility, they must prioritize both high quality and equitable access. This means ensuring that success in the education system is not determined by a student's socio-economic background. While the region has made significant strides in improving educational attainment - achieving near-universal primary coverage and increasing secondary enrolment - issues such as dropout rates remain a pressing concern, particularly as they tend to rise with age. Addressing dropout levels, especially among at-risk students, is crucial, as those without a secondary education are at a heightened risk of poverty and unemployment. Policymakers should implement targeted measures, including therapeutic programs and strategies that ensure smooth transitions between educational levels, to combat this issue effectively.

Completing upper secondary education is vital for accessing tertiary programs, which have also seen considerable improvement in enrolment rates over the past two decades. However, completion rates still lag behind OECD averages, and the financial barriers faced by students from lower socio-economic backgrounds hinder the potential of higher education to serve as a true engine for social mobility. Financing mechanisms such as student loans and grants must be made accessible to level the playing field.

Despite advancements in access and attainment, the quality of education in the region remains inadequate. The latest PISA data reveals a significant performance gap between LAC countries and their OECD counterparts, with underperformance in mathematics, science, and reading. Interestingly, while LAC exhibits higher socio-economic fairness, indicated by a weak socio-economic gradient that allows students to reach their potential regardless of background, overall proficiency levels remain low across the spectrum. Consequently, it appears that higher socio-economic fairness is not a result of strong performances among disadvantaged students; instead, it highlights the inadequate outcomes of advantaged students.

To counteract these challenges, countries in the region should focus on increasing their education spending and, more critically, on investing those resources wisely. Evidence suggests a positive correlation between cumulative spending and performance, up to a certain threshold that no LAC country has yet reached. Furthermore, countries with similar levels of expenditure outperform LAC nations, highlighting the need for improved resource allocation. Learning from the experiences of top-performing countries, such as Korea and Hong Kong, which have implemented strategies to attract the best candidates into teaching careers, could provide valuable insights for reform.

As the region moves forward, it is essential to recognize the connection between education performance and long-term well-being indicators, such as employment probabilities and tertiary attainment. By committing to more effective and equitable education funding, Latin America and the Caribbean can not only enhance their educational systems but also foster inclusive growth, reduce inequalities, and build a productive workforce that benefits all citizens. The time to act is now; the future of the region depends on the choices made in education today.

References

- Aleksynska, M. and A. Kolev (2021), “Education-occupation mismatch in the context of informality and development”, *OECD Development Centre Working Papers*, No. 346, OECD Publishing, Paris, <https://doi.org/10.1787/3291e65c-en>. [134]
- Archer, L. (2015), ““Science capital”: A conceptual, methodological, and empirical argument for extending bourdieusian notions of capital beyond the arts”, *Journal of Research in Science Teaching*, Vol. 52/7, pp. 922-948. [100]
- Arias Ortiz, E. et al. (2024), *El estado de la educación en América Latina y el Caribe 2023*, Banco Interamericano de Desarrollo, <https://doi.org/10.18235/0005515>. [65]
- Arias Ortiz, E. et al. (2024), *The State of Education in Latin America and the Caribbean 2023*, <https://publications.iadb.org/en/state-education-latin-america-and-caribbean-2023>. [12]
- Arnold, J. et al. (2024), “Towards better social protection for more workers in Latin America: Challenges and policy considerations”, *OECD Economics Department Working Papers*, No. 1804, OECD Publishing, Paris, <https://doi.org/10.1787/76a04c6f-en>. [35]
- Bourdieu, P. (1986), *The forms of capital*, pp. 241-258. [85]
- Broecke, S., G. Quintini and M. Vandeweyer (2017), “Explaining international differences in wage inequality: Skills matter”, *Economics of Education Review*, Vol. 60, pp. 112-124, <https://doi.org/10.1016/j.econedurev.2017.08.005>. [128]
- Brown, C., T. Hooley and T. Wond (2020), “Building career capital: developing business leaders’ career mobility”, *Career Development International*, Vol. 25/5, pp. 445-459, <https://doi.org/10.1108/CDI-07-2019-0186>. [86]
- Brunner, J. (2013), “The Rationale for Higher Education Investment in Ibero-America”, *OECD Development Centre Working Papers*, No. 319, OECD Publishing, Paris, <https://doi.org/10.1787/5k40d6717l8x-en>. [76]
- Brunori, P., F. Ferreira and G. Neidhöfer (2023), *Inequality of Opportunity and Intergenerational Persistence in Latin America*, <https://publications.iadb.org/en/inequality-opportunity-and-intergenerational-persistence-latin-america>. [8]
- Busso, M. and J. Messina (2020), *The Inequality Crisis: Latin America and the Caribbean at the Crossroads*, <https://publications.iadb.org/en/the-inequality-crisis-latin-america-and-the-caribbean-at-the-crossroads>. [7]
- CAF (2022), *Inherited inequalities: The role of skills, employment, and wealth*, <https://www.caf.com/media/4660888/red2022-re-eng.pdf>. [9]
- Chetty, R. (2022), “Social capital I: measurement and associations with economic mobility”, *Nature*, Vol. 608, pp. 108-121. [88]
- Covacevich, C. et al. (2021), “Indicators of teenage career readiness: An analysis of longitudinal data from eight countries”, *OECD Education Working Papers*, No. 258, OECD Publishing, Paris, <https://doi.org/10.1787/cec854f8-en>. [90]

- De La Mata, D. (2023), “The role of skills, employment, and wealth in the opportunities of new generations.” [33]
- Diemer, M. (2009), “Pathways to occupational attainment among poor youth of color: The role of sociopolitical development”, *The Counseling Psychologist*, Vol. 39, pp. 6-35. [111]
- ECLAC (2024), *Preventing and reducing school dropout in Latin America and the Caribbean*. [55]
- ECLAC (2023), *Panorama Regional en Educación*, https://www.cepal.org/sites/default/files/presentations/presentacion_d_trucco_cepal.pdf. [58]
- ECLAC, UNESCO and UNICEF (2022), *Education in Latin America and the Caribbean at a crossroads*. [56]
- ECLAC, UNESCO, UNICEF (2024), “Education in Latin America and the Caribbean at a Crossroads: Regional Monitoring Report SDG4—Education 2030”, *Comparative Education Review*, Vol. 68/2, pp. 312-314, <https://doi.org/10.1086/730227>. [66]
- Encinas-Martín, M. and M. Cherian (2023), *Gender, Education and Skills: The Persistence of Gender Gaps in Education and Skills*, OECD Skills Studies, OECD Publishing, Paris, <https://doi.org/10.1787/34680dd5-en>. [47]
- Ferranti, G. (2004), *Inequality in Latin America and the Caribbean: Breaking with History?*. [142]
- Friedman, S. and L. Laurison (2019), *The Class Ceiling: Why it pays to be privileged*, Policy Press. [84]
- Germán Feierherd, P. (2023), *The Pink Tide and Income Inequality in Latin America*, Cambridge University Press. [3]
- Granovetter, M. (1990), *Getting a job: a study of contacts and careers*, Harvard University Press. [97]
- Hanushek, E. et al. (2015), “Returns to skills around the world: Evidence from PIAAC”, *European Economic Review*, Vol. 73, pp. 103-130, <https://doi.org/10.1016/j.euroecorev.2014.10.006>. [127]
- Herdman, P. (2024), *Innovation in career pathways across five countries*, OECD Publishing. [108]
- Hout, M. and T. DiPrete (2006), “What we have learned: RC28’s contributions to knowledge about social stratification”, *Research in Social Stratification and Mobility*, Vol. 24/1, pp. 1-20, <https://doi.org/10.1016/j.rssm.2005.10.001>. [34]
- IDB (2024), www.iadb.org, <https://www.iadb.org/en/news/complexities-inequality-latin-america-and-caribbean#:~:text=March%2006%2C%202024,for%20developed%20countries%20in%20OECD>. [141]
- IDB (2023), *América Latina y el Caribe en PISA 2022: ¿Cómo le fue a la región?*, <https://publications.iadb.org/publications/spanish/viewer/America-Latina-y-el-Caribe-en-PISA-2022-omo-le-fue-a-la-region.pdf>. [137]
- IDB (2023), *América Latina y el Caribe en PISA 2022: ¿Cuántos tienen bajo desempeño?*, <https://publications.iadb.org/publications/spanish/viewer/America-Latina-y-el-Caribe-en-PISA-2022-cuantos-tienen-bajo-desempeno.pdf>. [138]

- ILO (2023), *2023 Labour Overview*. [48]
- ILO (2014), *Recent experiences of formalization in Latin America and the Caribbean*. [49]
- IMF (2024), *Regional Economic Outlook for the Western Hemisphere*, <https://www.imf.org/en/Publications/REO/WH/Issues/2024/04/19/regional-economic-outlook-western-hemisphere-april-2024#:~:text=The%20Western%20Hemisphere&text=Growth%20is%20now%20moderating%2C%20from,policies%20aimed%20at%20curbing%20inflation.> [28]
- IMF (2024), *Regional Economic Outlook for the Western Hemisphere*. [46]
- Inter-American Development Bank (2024), *The Complexities of Inequality in Latin America and the Caribbean*, <https://www.iadb.org/en/news/complexities-inequality-latin-america-and-caribbean>. [4]
- Jenkins, H. (2017), *Social Mobility and Economic Success*. [52]
- Jones, S., A. Mann and K. Morris (2016), “The ‘Employer Engagement Cycle’ in Secondary Education: analysing the testimonies of young British adults”, *Journal of Education and Work*, Vol. 29/7, pp. 834-856, <https://doi.org/10.1080/13639080.2015.1074665>. [101]
- Kashefpakdel, E. (2016), “Career education that works: an economic analysis using the British Cohort Study”, Vol. 30/3, pp. 217-234. [99]
- Kemple, J. (2008), *Career Academies: long-term impacts on labour market outcomes, educational attainment, and transitions to adulthood*, MDRC. [109]
- Kim, H. (2015), *Resetting Education Policy to Restore Social Mobility*. [51]
- Lafuente, E. (ed.) (2022), *¿Como reconstruir la educación postpandemia? Soluciones para cumplir con la promesa de un mejor futuro para la juventud*, Inter-American Development Bank, <https://doi.org/10.18235/0004241>. [143]
- Lee, Y. et al. (2021), “Equity in career development of high school students in South Korea: The role of school career education.”, *Education Sciences*, Vol. 11/1, p. 20, <https://doi.org/10.3390/educsci11010020>. [104]
- LeGallais, T. (2008), *The work experience placements of secondary school students: widening horizons or reproducing social inequality?*, Birmingham City University, https://www.educationandemployers.org/wp-content/uploads/2014/06/the_work_experience_placements_of_secondary_school_students.pdf. [103]
- Lyche, C. (2010), “Taking on the Completion Challenge: A Literature Review on Policies to Prevent Dropout and Early School Leaving”, *OECD Education Working Papers*, No. 53, OECD Publishing, Paris, <https://doi.org/10.1787/5km4m2t59cmr-en>. [68]
- Mann, A. (2024), *Teenage career development in England: A Review of PISA 2022 Data*. [94]
- Mann, A. (2021), *Career ready?: How schools can better prepare young people for working life in the era of COVID-19*, OECD Publishing, <https://doi.org/10.1787/e1503534-en>. [98]

- Mann, A. (2017), "Schools and the twenty-first century labour market: perspectives on structural change", *British Journal of Guidance and Counselling*, Vol. 45/2, pp. 208-218, <https://doi.org/10.1080/03069885.2016.1266440>. [89]
- Mann, A., C. Percy and E. Kashefpakdel (2018), *Socialised social capital: the capacity of schools to use careers provision to compensate for social capital deficiencies among teenagers*, Routledge, London. [106]
- McMahon, W. (1998), *Education and Growth in East Asia*. [19]
- Mercan, M. (2014), *The Effect of Education Expenditure on Economic Growth: The Case of Turkey*. [17]
- Mulakala, T. (2015), *Social Mobility: Experiences and Lessons from Asia*, KDI. [21]
- Nancy Birdsall, D. (1995), *Inequality and Growth Reconsidered: Lessons from East Asia*. [18]
- Neidhöfer, G., J. Serrano and L. Gasparini (2018), "Educational inequality and intergenerational mobility in Latin America: A new database", *Journal of Development Economics*, Vol. 134, pp. 329-349, <https://doi.org/10.1016/j.jdeveco.2018.05.016>. [43]
- New Brunswick Department of Education and Early Childhood Development (2023), *Career Education Framework in New Brunswick*, <https://www2.gnb.ca/content/dam/gnb/Departments/ed/pdf/K12/FRL/nb-career-education-framework.pdf>. [110]
- OECD (2024), *About PIAAC*, <https://www.oecd.org/en/about/programmes/piaac.html>. [40]
- OECD (2024), *Challenging Social Inequality Through Career Guidance: Insights from International Data and Practice*, OECD Publishing, Paris, <https://doi.org/10.1787/619667e2-en>. [83]
- OECD (2024), *Education at a Glance*, OECD Publishing. [69]
- OECD (2024), *Government at a Glance: Latin America and the Caribbean 2024*, https://www.oecd.org/en/publications/government-at-a-glance-latin-america-and-the-caribbean-2024_4abdba16-en.html. [2]
- OECD (2024), *Government at a Glance: Latin America and the Caribbean 2024*, OECD Publishing, Paris, <https://doi.org/10.1787/4abdba16-en>. [139]
- OECD (2024), *Income inequality indicator*, <https://www.oecd.org/en/data/indicators/income-inequality.html>. [5]
- OECD (2024), *OECD Economic Surveys: Mexico 2024*, OECD Publishing, Paris, <https://doi.org/10.1787/b8d974db-en>. [73]
- OECD (2023), *Review Education Policies - Education GPS*, <https://gpseducation.oecd.org/revieweducationpolicies/#!node=&filter=all>. [16]
- OECD (2023), *Building Future-Ready Vocational Education and Training Systems*, OECD Reviews of Vocational Education and Training, OECD Publishing, Paris, <https://doi.org/10.1787/28551a79-en>. [123]

- OECD (2023), "Career talks with guest speakers: A guide to delivering an effective career development activity", *OECD Education Policy Perspectives*, No. 69, OECD Publishing, Paris, <https://doi.org/10.1787/93594cb3-en>. [96]
- OECD (2023), *Education at a Glance 2023*, https://www.oecd-ilibrary.org/education/education-at-a-glance-2023_e13bef63-en. [14]
- OECD (2023), *Education at a Glance 2023: OECD Indicators*, OECD Publishing, Paris, <https://doi.org/10.1787/e13bef63-en>. [71]
- OECD (2023), *Main Findings from the 2022 OECD Risks that Matter Survey*, OECD Publishing, Paris, <https://doi.org/10.1787/70aea928-en>. [114]
- OECD (2023), *Multi-dimensional Review of El Salvador: Strategic Priorities for Robust, Inclusive and Sustainable Development*, OECD Development Pathways, OECD Publishing, Paris, <https://doi.org/10.1787/2f3d5e1f-en>. [64]
- OECD (2023), *OECD Skills Outlook 2023: Skills for a Resilient Green and Digital Transition*, OECD Publishing, Paris, <https://doi.org/10.1787/27452f29-en>. [115]
- OECD (2023), *PISA 2022 Results (Volume I): The State of Learning and Equity in Education*, <https://doi.org/10.1787/53f23881-en>. [57]
- OECD (2023), *PISA 2022 Results (Volume I): The State of Learning and Equity in Education*, PISA, OECD Publishing, Paris, <https://doi.org/10.1787/53f23881-en>. [116]
- OECD (2023), *PISA 2022: Resultados para América Latina y el Caribe*, https://www.cepal.org/sites/default/files/presentations/presentacion_d_salinas_ocde.pdf. [79]
- OECD (2023), *Skills in Latin America: Insights from the Survey of Adult Skills (PIAAC)*, OECD Skills Studies, OECD Publishing, Paris, <https://doi.org/10.1787/5ab893f0-en>. [30]
- OECD (2022), *Education at a Glance 2022: OECD Indicators*, OECD Publishing, Paris, <https://doi.org/10.1787/3197152b-en>. [72]
- OECD (2022), *Gender Equality in Peru: Towards a Better Sharing of Paid and Unpaid Work*, Gender Equality at Work, OECD Publishing, Paris, <https://doi.org/10.1787/e53901b5-en>. [63]
- OECD (2022), *Pathways to Professions: Understanding higher vocational and professional tertiary education systems*, <https://doi.org/10.1787/a81152f4-en>. [124]
- OECD (2022), *Skills for the Digital Transition: Assessing Recent Trends Using Big Data*, OECD Publishing, Paris, <https://doi.org/10.1787/38c36777-en>. [37]
- OECD (2021), *Education at a Glance 2021*, https://www.oecd-ilibrary.org/education/education-at-a-glance-2021_b35a14e5-en. [13]
- OECD (2021), *Education at a Glance 2021: OECD Indicators*, OECD Publishing, Paris, <https://doi.org/10.1787/b35a14e5-en>. [146]
- OECD (2021), *Experiencing the workplace: the importance and benefits for students*, OECD Publishing, <https://doi.org/10.1787/b679d759-en>. [95]

- OECD (2021), *Future-Ready Adult Learning in Latin America*, [10]
https://www.oecd.org/en/publications/future-ready-adult-learning-in-latin-america_18d2f2f1-en.html.
- OECD (2021), *Future-Ready Adult Learning in Latin America. Action Plan*. [44]
- OECD (2021), *How's Life in Latin America? : Measuring Well-being for Policy Making*, [1]
https://www.oecd-ilibrary.org/social-issues-migration-health/how-s-life-in-latin-america_2965f4fe-en.
- OECD (2021), *How's Life in Latin America?: Measuring Well-being for Policy Making*, OECD [54]
 Publishing, Paris, <https://doi.org/10.1787/2965f4fe-en>.
- OECD (2021), *OECD Skills Outlook 2021: Learning for Life*, OECD Publishing, [117]
<https://doi.org/10.1787/0ae365b4-en>.
- OECD (2021), *OECD Skills Outlook 2021: Learning for Life*, OECD Publishing, Paris, [29]
<https://doi.org/10.1787/0ae365b4-en>.
- OECD (2020), *Dream Jobs? Teenagers' Career Aspirations and the Future of Work*, [93]
<https://www.oecd.org/education/dream-jobs-teenagers-career-aspirations-and-the-future-of-work.htm>.
- OECD (2020), *Education at a Glance 2020: OECD Indicators*, OECD Publishing, Paris, [122]
<https://doi.org/10.1787/69096873-en>.
- OECD (2020), *OECD Employment Outlook 2020: Worker Security and the COVID-19 Crisis*, [121]
 OECD Publishing, Paris, <https://doi.org/10.1787/1686c758-en>.
- OECD (2019), *How are PISA results related*. [59]
- OECD (2019), *Getting Skills Right: Future-Ready Adult Learning Systems*, OECD Publishing, [125]
 Paris, <https://doi.org/10.1787/9789264311756-en>.
- OECD (2019), *PISA 2018 Assessment and Analytical Framework*, PISA, OECD Publishing, [77]
 Paris, <https://doi.org/10.1787/b25efab8-en>.
- OECD (2019), *PISA 2018 Assessment and Analytical Framework*, [78]
<https://doi.org/10.1787/b25efab8-en>.
- OECD (2019), *Skills Matter: Additional Results from the Survey of Adult Skills*, https://www.oecd-ilibrary.org/education/skills-matter_1f029d8f-en. [20]
- OECD (2019), *Skills Matter: Additional Results from the Survey of Adult Skills*, OECD Skills [39]
 Studies, OECD Publishing, Paris, <https://doi.org/10.1787/1f029d8f-en>.
- OECD (2019), *Survey of Adult Skills (PIAAC)*, [118]
<http://www.oecd.org/skills/piaac/publicdataandanalysis/>.
- OECD (2019), *Tackling Vulnerability in the Informal Economy*, https://www.oecd-ilibrary.org/development/tackling-vulnerability-in-the-informal-economy_939b7bcd-en. [15]
- OECD (2018), *A Broken Social Elevator? How to Promote Social Mobility*, OECD Publishing, [32]
 Paris, <https://doi.org/10.1787/9789264301085-en>.

- OECD (2018), *Equity in Education: Breaking Down Barriers to Social Mobility*, PISA, OECD Publishing, Paris, <https://doi.org/10.1787/9789264073234-en>. [42]
- OECD (2018), *Opportunities for All: A Framework for Policy Action on Inclusive Growth*, OECD Publishing, Paris, <https://doi.org/10.1787/9789264301665-en>. [61]
- OECD (2018), *PISA 2018 Results (Volume I): What Students Know and Can Do*, OECD Publishing, Paris, <https://doi.org/10.1787/19963777>. [147]
- OECD (2017), *OECD Economic Surveys: Argentina 2017: Multi-dimensional Economic Survey*, OECD Publishing, Paris, https://doi.org/10.1787/eco_surveys-arg-2017-en. [67]
- OECD (2017), *To what extent does parents' education influence their children's educational attainment?*, <https://www.oecd-ilibrary.org/docserver/eag-2017-10-en.pdf?expires=1728389065&id=id&accname=guest&checksum=C2C594C3AAF04FEC5984BE4E3002EE60>. [26]
- OECD (2016), *PISA 2015 Results (Volume I): Excellence and Equity in Education*, PISA, OECD Publishing, Paris, <https://doi.org/10.1787/9789264266490-en>. [81]
- OECD (2016), *Skills Matter: Further Results from the Survey of Adult Skills*, OECD Skills Studies, OECD Publishing, Paris, <https://doi.org/10.1787/9789264258051-en>. [41]
- OECD (2015), "Higher education in Latin America: Challenges and opportunities", in *E-Learning in Higher Education in Latin America*, OECD Publishing, Paris, <https://doi.org/10.1787/9789264209992-4-en>. [74]
- OECD (2015), *Survey of Adult Skills (PIAAC)*, <http://www.oecd.org/skills/piaac/publicdataandanalysis/>. [119]
- OECD (2013), *OECD Skills Outlook 2013: First Results from the Survey of Adult Skills*, OECD Publishing, Paris, <https://doi.org/10.1787/9789264204256-en>. [38]
- OECD (2013), *PISA 2012 Results: Excellence through Equity (Volume II)*, https://www.oecd-ilibrary.org/education/pisa-2012-results-excellence-through-equity-volume-ii_9789264201132-en. [27]
- OECD (2012), "Does Money Buy Strong Performance in PISA?", *PISA in Focus*, No. 13, OECD Publishing, Paris, <https://doi.org/10.1787/5k9fhmfzc4xx-en>. [82]
- OECD (2012), *OECD Survey of Adult Skills (PIAAC)*, <http://www.oecd.org/skills/piaac/publicdataandanalysis/>. [120]
- OECD (2010), *Education Policies for Upward Social Mobility in Latin America*, https://www.oecd.org/en/publications/2010/11/education-policies-for-upward-social-mobility-in-latin-america_g17a1f51.html. [126]
- OECD (2010), *Education, Social Mobility and the Middle Sectors*, https://www.oecd-ilibrary.org/development/latin-american-economic-outlook-2011/education-social-mobility-and-the-middle-sectors_leo-2011-9-en. [11]
- OECD (2010), *Latin America Economic Outlook 2011: How Middle Class is Latin America*, <http://dx.doi.org/leo-2011-en>. [144]

- OECD (2010), *Latin American Economic Outlook 2011: How Middle-Class Is Latin America?*, OECD Publishing, Paris, <https://doi.org/10.1787/leo-2011-en>. [75]
- OECD (2010), *The high cost of low education performance*. [60]
- OECD and ILO (2020), *Social Dialogue, Skills and COVID-19*. [133]
- OECD/CAF/ECLAC (2016), *Latin American Economic Outlook 2017: Youth, Skills and Entrepreneurship*, OECD Publishing, Paris, <https://doi.org/10.1787/leo-2017-en>. [145]
- OECD et al. (2023), *Latin American Economic Outlook 2023: Investing in Sustainable Development*, OECD Publishing, Paris, <https://doi.org/10.1787/8c93ff6e-en>. [140]
- OECD et al. (2019), *Latin American Economic Outlook 2019: Development in Transition*, OECD Publishing, Paris, <https://doi.org/10.1787/g2g9ff18-en>. [135]
- OECD et al. (2022), *Latin American Economic Outlook 2022: Towards a Green and Just Transition*, OECD Publishing, Paris, <https://doi.org/10.1787/3d5554fc-en>. [36]
- OECD, E. (2023), *Latin American Economic Outlook 2023. Investing in Sustainable Development*, <https://doi.org/10.1787/20725140>. [136]
- Oxera Consulting LLP (2020), *The impact of social mobility on productivity*, https://www.suttontrust.com/wp-content/uploads/2020/01/Oxera-report_WEB_FINAL.pdf. [131]
- Patrinos, G. (2004), *Returns to Investment in Education: A Further Update*. [23]
- Perry, B. (2016), “Misalignment of Career and Educational Aspirations in Middle School: Differences across Race, Ethnicity, and Socioeconomic Status”, *Social Sciences*, Vol. 5/3, <https://doi.org/10.3390/socsci5030035>. [92]
- Renée, L. (2023), *The Long-Term Effects of Career Guidance in High School: Evidence from a randomised experiment*, https://economie.esq.uqam.ca/wp-content/uploads/sites/54/2023/03/Guidance_LRenée_2023.pdf. [112]
- Resnjanskij, S. (2023), *Mentoring erhöht die Ausbildungsbeteiligung benachteiligter Jugendlicher*, <https://www.ifo.de/DocDL/sd-2023-12-ZDG-berufseinstieg-wachstumsfaktor.pdf>. [107]
- Salvanes, K. and A. Bjorklund (2010), “Education and Family Background: Mechanisms and Policies”, *SSRN Electronic Journal*, <https://doi.org/10.2139/ssrn.1620398>. [45]
- Sehnbruch, K., M. Apablaza and J. Foster (2024), “Poor-Quality Employment: Who Is Deprived in Our Labour Markets?”, *LSE Public Policy Review*, Vol. 3/2, <https://doi.org/10.31389/lsepr.104>. [31]
- Skovhus, R. (2016), “A focus on educational choice has social justice consequences – an empirical study informed by Sen’s capability approach.”, *Journal of the National Institute of Career Education and Counselling*, Vol. 36, pp. 54-60, <https://doi.org/10.20856/jnic>. [105]
- Social Research and Demonstration Corporation (2009), *Future to discover: interim impacts report*, https://srdc.org/wp-content/uploads/2022/07/FTD_IIR_report_ENG.pdf. [113]

- Staff, J. (2010), "Uncertainty in early occupational aspirations: role exploration or aimlessness?", *Social Forces*, Vol. 119, pp. 55-69, <https://doi.org/10.1353/sof.2010.0088>. [91]
- Stanley, J. and A. Mann (2014), *A theoretical framework for understanding employer engagement*, in Mann, A. et al. (eds), *Understanding employer engagement in education*, Routledge, London. [102]
- The Asia Foundation and Korea Development Institute (KDI) (2015), *Social Mobility: Experiences and Lessons from Asia*, The Asia Foundation. [129]
- Tomlinson, M. et al. (2022), "Developing graduate employability for a challenging labour market: the validation of the graduate capital scale", *Journal of Applied Research in Higher Education*, Vol. 14/3, pp. 1193-1209. [87]
- Torche, F. (2014), "Intergenerational Mobility and Inequality: The Latin American Case", *Annual Review of Sociology*, Vol. 40/1, pp. 619-642, <https://doi.org/10.1146/annurev-soc-071811-145521>. [53]
- UNDP (2021), *Trapped? Inequality and Economic Growth in Latin America and the Caribbean*, <https://www.undp.org/latin-america/publications/trapped-inequality-and-economic-growth-latin-america-and-caribbean>. [6]
- UNESCO (2024), *The urgency of educational recovery in Latin America and the Caribbean*. [62]
- UNESCO (2005), *Guidelines for inclusion: ensuring access to education for all*, <https://unesdoc.unesco.org/ark:/48223/pf0000140224>. [25]
- UNICEF (2022), *Two years after: Saving a generation*, <https://www.unicef.org/lac/en/reports/two-years-after-saving-a-generation>. [24]
- Valenzuela, J. (2022), *Trajectory and policies for inclusion in higher education in Latin America and the Caribbean in the context of the pandemic*. [70]
- Willms, J. (2006), "Variation in socioeconomic gradients among cantons in French- and Italian-speaking Switzerland: Findings from the OECD PISA", *Educational Research and Evaluation*, Vol. 12(2), pp. 129-154. [80]
- World Bank (2024), *World Bank Open Data*, <https://data.worldbank.org/> (accessed on June 2024). [130]
- World Bank (2021), *World Development Indicators*, <https://databank.worldbank.org/source/world-development-indicators>. [22]
- World Bank (2020), *World Bank Enterprise Survey*, <https://prosperitydata360.worldbank.org/> (accessed on June 2024). [132]
- World Economic Forum (2020), *The Global Social Mobility Report 2020: Equality, Opportunity and a New Economic Imperative*, World Economic Forum, https://www3.weforum.org/docs/Global_Social_Mobility_Report.pdf. [50]

4

Career guidance, social inequality and social mobility in Latin America and the Caribbean

PISA 2022 shows that seven out of ten students across participating countries in Latin America and the Caribbean expect to work as a senior manager or professional by the age of 30. A similar phenomenon is observed across most OECD countries. However, in the competition for such work, young adults from more socially disadvantaged backgrounds struggle to compete equitably with similarly attaining peers from advantaged backgrounds. Career guidance has a key role to play in challenging social inequalities and supporting social mobility. New analysis of data from longitudinal surveys and the OECD Programme for International Student Assessment (PISA) provides insight into the impact of socio-economic background on teenage career development and the forms of intervention that can be most confidently expected to enhance employment outcomes for young people.

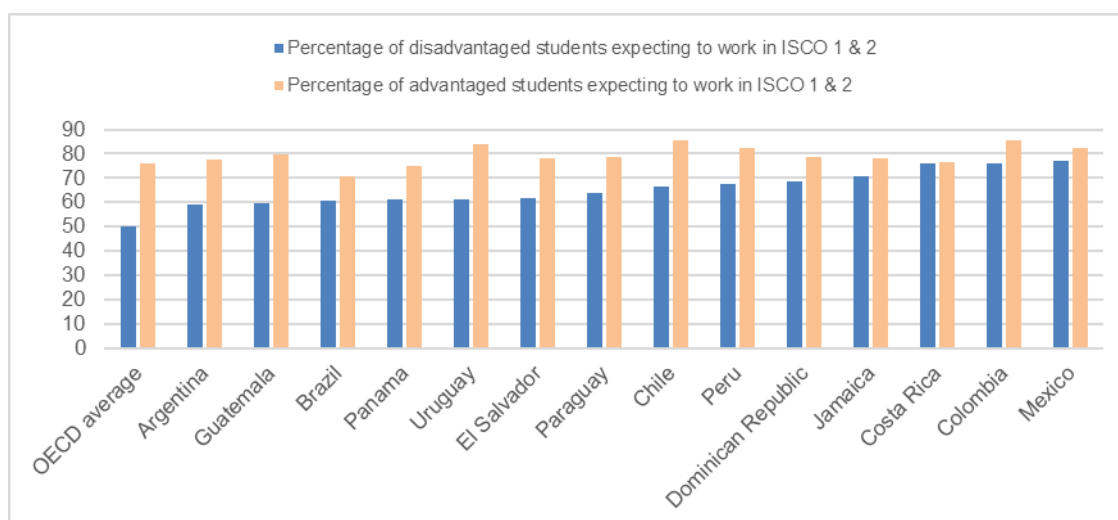
The most ambitious generation in history

Since 2000, the OECD Programme for International Student Assessment (PISA) has asked secondary school students at ages 15 and 16 what type of job they expect to have around age 30. The results are coded using International Standardised Classification of Occupations (ISCO) categories widely used to describe the segmentation of the labour market. There are ten major categories in all and since 2000, the career expectations of students across the OECD and many non-OECD countries have increasingly focused on two fields: ISCO major category 1 (senior managers) and most notably ISCO major category 2 (professionals, such as doctors, engineers, lawyers and teachers). In 2000, around half (53%) of students across the OECD who expressed an occupational expectation said that they would go on to work in one of these categories. By 2022, this figure had risen to 63%. As Figure 4.1 illustrates, while this number is driven by interest from students from high economic, social and cultural status (ESCS) backgrounds, such aspirations are also very popular among their more ESCS disadvantaged peers and this is strongly the case in Latin America and the Caribbean.

Defining socio-economic status in PISA

The PISA index of economic, social and cultural status (ESCS) makes it possible to draw comparisons between students and schools with different socio-economic profiles. The index is based on three components: parents' educational attainment, the status of their occupation and home possessions (OECD, 2024^[83])

Figure 4.1. Percentage of LAC students expecting to work in ISCO major categories 1 & 2, by ESCS



Note: Countries/economies are in ascending order of Actual Labour Force (ISCO 1 & 2)

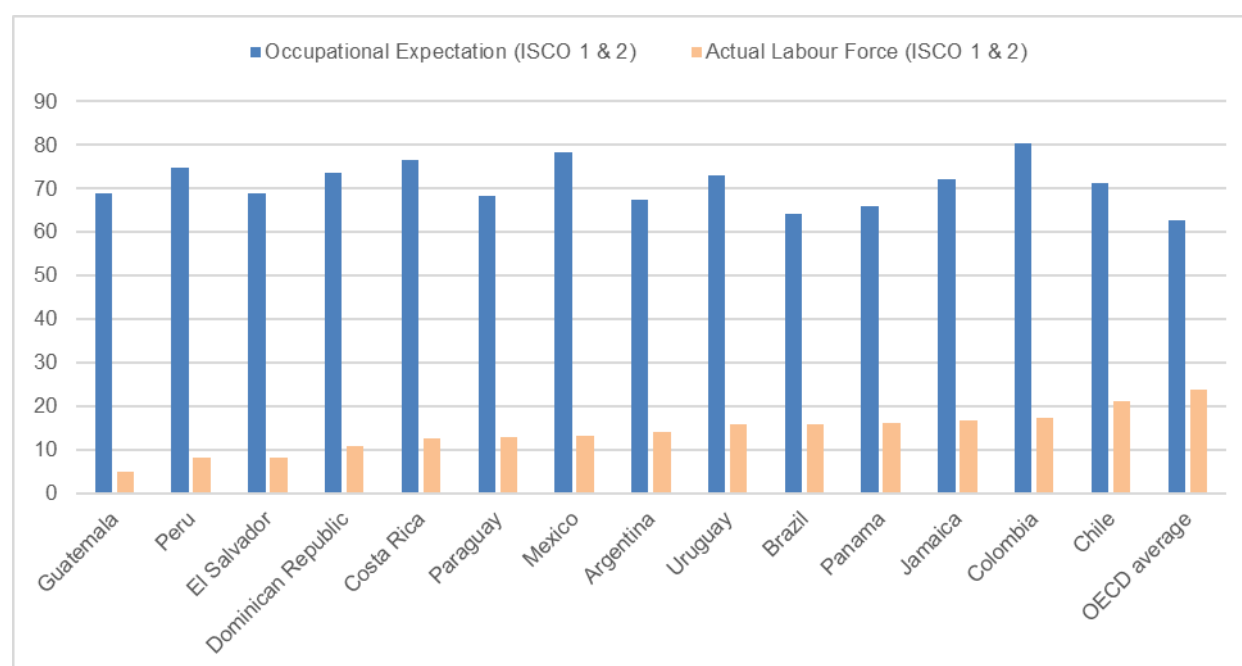
1. ISCO refers to International Standardised Classification of Occupations: ISCO major category 1 (senior managers), ISCO major category 2 (professionals, such as doctors, engineers, lawyers and teachers)

Source: PISA 2022 database and ILO 2023 database

However, many of those young people who plan on careers as a senior manager or professional are destined for disappointment. Figure 4.2 compares the percentages of students expressing such an expectation against the actual proportions of adults who work in ISCO 1 and 2 categories within OECD labour markets. In no country does demand match supply. In LAC countries, student interest is six times or more higher than the level of actual demand.

Figure 4.2. Percentage of young people who expect an occupation in ISCO major categories 1 or 2 at age 30 compared to actual labour force distribution of the country

Self-reported, PISA 2022 and ILO 2023.



Note: Countries/economies are in ascending order of Actual Labour Force (ISCO 1 & 2)

1. ISCO refers to International Standardised Classification of Occupations: ISCO major category 1 (senior managers), ISCO major category 2 (professionals, such as doctors, engineers, lawyers and teachers)

Source: PISA 2022 database and ILO 2023 database

Who then succeeds in obtaining one of these dream jobs?

The OECD Programme for International Assessment of Adult Competencies (PIAAC) provides an insight into the relative success of young people in the early labour market. PIAAC gathers considerable data both about the jobs that individuals do and factors which commonly influence success in the labour market, such as their levels of skills (literacy), education and qualifications, gender, and migrant status. Using these variables as statistical controls, it is possible to assess the extent to which young people who were born into socio-economically disadvantaged families go on to face additional barriers as they seek to convert their qualifications and skills into successful employment. Presented in the OECD study *Challenging social inequality through career guidance* (OECD, 2024^[83]), the analysis shows that the labour market outcomes of young adults (under the age of 35) across the OECD are heavily influenced by their social and economic background. Even with the same levels of education and skills, across the OECD young adults whose parents had not completed upper secondary education are three and half times more likely than their socially advantaged counterparts (with at least one parent with tertiary education) to be NEET (Not in Education Employment or Training). Socially disadvantaged young adults are also less likely to be

employed in the services sectors and more likely to find employment in fields such as construction and manufacturing. Even with the same levels of education, young adults from high socio-economic backgrounds are more likely to work in high skilled sectors, such as the professions, than their peers from low socio-economics status (SES) backgrounds. Wage penalties can also be identified within PIAAC data. In a regression analysis of wage penalties across OECD countries using pooled data and controlling for a range of variables including educational attainment and literacy level, young adults whose parents had not attained upper secondary education were found to earn 6% less, and those with at least one parent who had attained upper secondary education 4% less than peers with at least one adult who had obtained tertiary education. The impact of ESCS on employment outcomes varies across countries and national studies offer deeper insight into the experiences of individuals. An Italian longitudinal study for example finds that an additional year of parental education increases the weekly wages of their son(s) by 12% after twenty years of work, irrespective of the child's educational levels (OECD, 2024^[83]). In the competition for work, while higher levels of qualifications and skills are strongly related to better employment outcomes, they do not fully determine success. While many young people from all backgrounds aspire to work in high status occupations, the children of more socially advantaged parents enjoy a considerable advantage when it comes to securing and prospering within such employment.

In their study of inequality Friedman and Laurison (2019^[84]) introduce the concept of a 'class ceiling': class-based gaps in access to elite professions (such as managers, lawyers, doctors and other professional occupations) and pay within those professions that are linked to SES. According to the authors, the class ceiling describes frequently found limits on the career advancement of individuals from working-class backgrounds. Elite occupations are dominated by workers from privileged families and those inequalities cannot be fully explained by ability. Even when holding constant educational attainment including attendance at elite schools, people from working-class backgrounds are still less likely than people from privileged backgrounds to work in elite occupations.

Understanding variations in employment outcomes

Consideration of the labour market experiences of comparably educated and skilled young adults allows for a confident, if *de minimus*, understanding of the impact of socio-economic background on labour market success. Such studies compare young people with similar levels of academic achievement and do not take account of the fact that young people from low SES backgrounds are less likely to leave education highly qualified (OECD, 2018^[42]) – an important factor in itself in understanding the ways that socio-economic background can shape outcomes. Students from low SES backgrounds commonly face additional barriers in securing the highest levels of educational success. They are less likely to have access to books, computers and other learning resources, to participate in extra-curricular activities, to have their learning supported by private tutors and to benefit from parental insight into the operation of tertiary education and how it enables access to particular occupations.

What then is the role of education systems in further enabling social mobility by going beyond academic success? A productive means of conceptualising the role of schools in supporting more equitable employment outcomes is to draw upon theoretical approaches commonly used by labour market analysts to make sense of variations in labour market experiences. Capitals theory explores the ways in which economic, human, social and cultural capital shape success in the world of work (Bourdieu, 1986^[85]; Brown, Hooley and Wond, 2020^[86]; Friedman and Laurison, 2019^[84]; Tomlinson et al., 2022^[87]). Recruitment processes for example are structured around the specific qualifications and experiences that an applicant offers (human capital), but it is also well attested that personal contacts and networks provide considerable advantage both through active support and sources of information in the search for employment (social capital) (Chetty, 2022^[88]). More recently, analysts have focused too on cultural capital as a term used broadly to refer to what an individual thinks about themselves and their possible future within society.

Strongly influenced by the work of French sociologist Pierre Bourdieu, studies highlight the ways in which the attitudes, assumptions and expectations of individuals reflect their social backgrounds, varying in what they consider reasonable and comfortable to pursue in terms of career ambitions. Some young people more than others demonstrate confident understanding of, and ease with, the ‘rules of the game’ as they relate to specific careers as they embark on their working lives (OECD, 2024^[83]).

Career guidance and the development of human, social and cultural capital

A growing international research literature has explored teenage career development through the lens of capitals theory, exploring both the ways in which guidance interventions can be seen to enhance ultimate human, social and cultural capital of young people and how these accumulations of resources can shape engagement within guidance provision (OECD, 2024^[83]). While studies have initially explored career-related development and its outcomes related to all students, increasingly studies are highlighting variation in impacts linked to SES which can serve to either narrow social inequalities or contribute to their maintenance or growth. PISA data provide means of assessing the extent to which such theorisations can help make sense of variations in career development and their long-term implications.

Human capital accumulation can for example be understood in terms of a young person’s capacity to make informed decisions about their engagement in education and training. Across the world as young people stay longer in education, they face mounting decisions about how to build their personalised human capital through investments in learning. As former editor of the *Journal of Education and Work*, Hugh Lauder explains such investment decisions are both important and often difficult for young people.

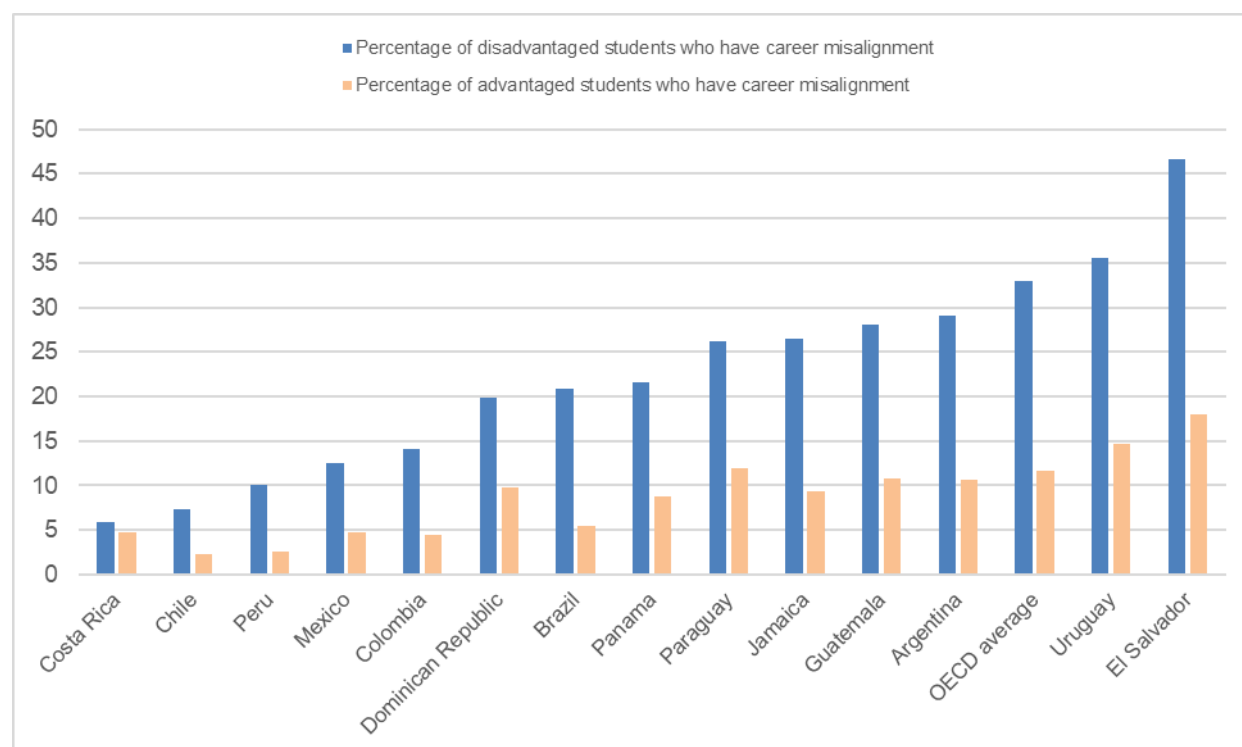
If we think of young people making investment decisions as they decide on the qualifications, training and experience (collectively, the human capital) they plan to accumulate prior to leaving education to optimise their ultimate earnings in the labour market, we need to recognise the importance of access to good information about what that labour market actually wants and demands in order for properly informed decision making to take place. In the absence of good labour market signalling, it can be no surprise that poor investment decisions will be made and ... skills mismatches ... become a predictable result. Young people ... have one big shot at getting their primary human capital accumulation right. If what they accumulate isn’t what employers want (...) then the cash investment (regardless of the psychological price) required of the individual is frighteningly high.
Lauder in (Mann, 2017^[89])

At the age of 15, PISA 2022 shows that more than one-third of students across the OECD can be designated as career uncertain. In the 14 LAC countries participating in PISA 2022, on average 44% of students are uncertain. Such uncertainty is strongly associated in longitudinal studies with poorer ultimate employment outcomes at age 25 (Covacevich et al., 2021^[90]) and PISA shows that career uncertainty is most commonly found among lower academic performers, boys and students from low ESCS backgrounds. Such students are at greater risk of aimlessness as they progress through education (Staff, 2010^[91]). For those students who do express an occupational expectation moreover, PISA shows widespread confusion. Across the OECD, a minimum of one student in five can be categorised as misaligned, a term used to describe circumstances when the occupational plans of students do not align well with their educational plans (Perry, 2016^[92]). Where students underestimate the levels of education required for their job plan, risks are strong of long-term employment outcomes being poorer than would be expected given education levels (Covacevich et al., 2021^[90]). Within OECD data, such misalignment is assessed when students state that they will work in a job typically requiring tertiary education (ISCO 1 and 2 major categories), but do not plan on attending tertiary education. Misalignment is strongly associated with socio-economic backgrounds (Covacevich et al., 2021^[90]). Across LAC countries in PISA 2022, 8% of

students from the highest ESCS backgrounds could be classified as misaligned, compared to 21% of low ESCS students (Figure 4.3).

Figure 4.3. Percentage of students whose education and career expectations are not aligned

Self-reported, PISA 2022



Note: Countries/economies are in ascending order of percentage of disadvantaged students whose career expectations to work in an ISCO 1 or 2 profession are not aligned with their education plans which do not include tertiary education.

1. ESCS refers to the PISA index of economic, social and cultural status 2. A socio-economically advantaged (disadvantaged) student is a student in the top (bottom) quarter of ESCS in his or her own country/economy.

Source: PISA 2022 database.

Looking solely at the highest performing students on the PISA tests (defined in terms of students achieving at least level 4 on one of the tests on reading, mathematics and science and at least level 2 on all assessments), further evidence of the role of ESCS in shaping aspirations emerges. Considering just those students who performed at the highest levels on the science test, high-achieving advantaged students are more than twice as likely as disadvantaged students, on average across the OECD, to express both an intention to pursue tertiary education and to anticipate working in a professional or managerial occupation by age 30 (OECD, 2020^[93]). In LAC countries however, this gap is negligible. High performing students from low ECSC backgrounds do not lack ambition.

PISA also shows that students commonly exhibit narrow interests in the labour market, focusing their career expectations on a small number of occupational areas (OECD, 2020^[93]). Indeed, across the LAC countries for which data are available through PISA 2022, 64% or more of girls and 61% of boys at 15 with a clear job plan expect to work in one of ten choices that are most popular among their peers, higher than OECD averages. At an age when students in many countries anticipate specialising their studies (and so constraining potential future opportunities) within upper secondary education, uncertainty, confusion and heavy concentration in career thinking is widespread. PISA shows that low ESCS students are routinely

more poorly placed to make investment decisions in education and training, demonstrating forms of career thinking that in longitudinal studies are significantly associated with employment penalties in the early labour market (Covacevich et al., 2021^[90]).

However, PISA confirms that engagement in career guidance activities serves to enhance the career thinking of students. Analysis of PISA data illustrates that with statistical controls in place for gender, ESCS and academic performance that students who participate in a range of guidance activities (including speaking with a guidance counsellor, participating in career focused conversations, completing psychometric questionnaires, participating in job fairs and workplace visits/job shadowing, using the internet to research careers and first-hand work experiences through internships, volunteering and part-time work) are significantly less likely to be uncertain about their career thinking or misaligned in their career planning (Covacevich et al., 2021^[90]) (Mann, 2024^[94]). In LAC countries, similar evidence highlighting the effectiveness in enhancing the career thinking of students is apparent in PISA data.

There are also significant links between these activities and students being more likely to express ambitious plans for the future (defined as an expectation of working in an ISCO 1 or 2 profession) and to demonstrate instrumental motivation towards school, believing that it can help them to succeed in the jobs market – two further aspects of teenage career thinking that are associated with better ultimate employment outcomes in longitudinal studies (Covacevich et al., 2021^[90]). Through career guidance interventions, students can be seen to gain the capacity to enhance their career thinking allowing more informed investment in their accumulation of human capital.

Turning to social capital formation, first-hand experiences of workplaces and with people from the world of work provide means for students to build resources in forms relevant to their career plans. Social contacts can provide access to valuable work-based experiences which in turn can lead to recommendations and job offers (OECD, 2021^[95]). Less intense forms of employer engagement can also enhance outcomes for students. Longitudinal studies highlight positive relations between a range of student encounters with people in work and better ultimate employment outcomes (Covacevich et al., 2021^[90]). Studies exploring teenage participation in career talks with guest speakers in Canada, United Kingdom and Uruguay all show positive impacts in terms of better employment outcomes (lower NEET rates, higher than expected earnings) at age 25. Surveys of young adults reveal that career talks are widely viewed as being helpful in deciding on a career, getting a job and getting into university (OECD, 2023^[96]).

Work initiated by US sociologist Mark Granovetter conceptualises the value of more transient forms of social capital as the ‘strength of weak ties’ (Granovetter, 1990^[97]). Through social interactions with people outside of their immediate social circles, individuals can be seen to gain access to additional sources of useful information from people who know different things (Mann, 2021^[98]; Staff, 2010^[91]) (Kashefpakdel, 2016^[99]). The power of the interaction lies in the perceived authenticity and trustworthiness of the information source. Through career talks and job fairs, guidance systems can provide students with the opportunity to engage with multiple individuals from the world of work – and studies show that the higher the volume of teenage contacts, the greater the long term benefits they enjoy (OECD, 2023^[96]). Through such interactions, students gain potential access to new, trusted information that helps shape their self-conceptions and their understanding of whether potential career pathways would be attractive and suitable for them as individuals (OECD, 2023^[96]). Access to such sources of information outside of schooling is linked to student social background. On average 95% of students in the highest ESCS quartile in the 14 LAC countries participating in PISA 2022 had spoken to a parent or family member about their future education compared to 87% of students from the most disadvantaged quartile.

Personal interactions can provide students with the opportunity to connect directly with people working in industries of interest. In this way, as well as gaining valuable information about more productive investments in education and training linked to specific careers, they are exposed to distinct workplace cultures. Described often as understanding the ‘rules of the game’ (Archer, 2015^[100]), students can be

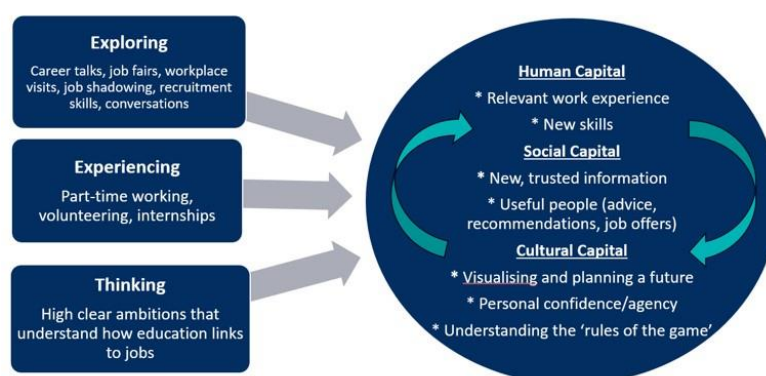
presented with powerful opportunities to learn what employers most value in potential recruits and the forms of behaviour and display which can be expected to provide a recruiter with confidence that a young person would fit in well with the working culture. For students, authentic experiences of this nature will provide opportunities to observe and practice potential vocational identities. For some, this might lead to a rejection of a potential career path, for others it provides deeper insight into how it is that some succeed and others fail in achieving their ambitions, so underpinning emergent senses of personal agency.

In textual analysis of written statements by 190 young British adults aged 19-24 who felt that they had gained something of value from their engagements with employers through their secondary schools, Jones, Mann and Morris (2016^[101]) find that while evidence of human and social capital accumulation are found, most frequently the benefits that students felt they gained from such forms of guidance are related to such cultural capital. Respondents reported growing confidence, clearer career thinking and better understanding of the need for educational investment that underpinned stronger senses of agency and direction through education and training towards desirable work. However, the forms of career development observed in these reflections indicate continual interactions between the different forms of capital.

Through [school-mediated] employer engagement activities, a teenager may make the contacts needed to be offered a job (social capital ... as access to employment) while simultaneously acquiring the expertise or ability to make them employable in that role (human capital ... as skills development). Or, to give another example, a young adult may report maturing and becoming more assured about themselves (cultural capital ... as enhanced personal confidence) as a result of trusted information from employers (social capital ... as authentic guidance) (Jones, Mann and Morris, 2016^[101])

As Figure 4.4 illustrates, engagement in those forms of career development which are most strongly evidenced in longitudinal studies as linking to better employment outcomes provides resources for young people which build upon each other in similar ways. A student's confidence in career progression for example enables greater value to be extracted from workplace experiences and interaction with people in work.

Figure 4.4. Conceptualisation of the relationship between participation in career development and capitals enhancement



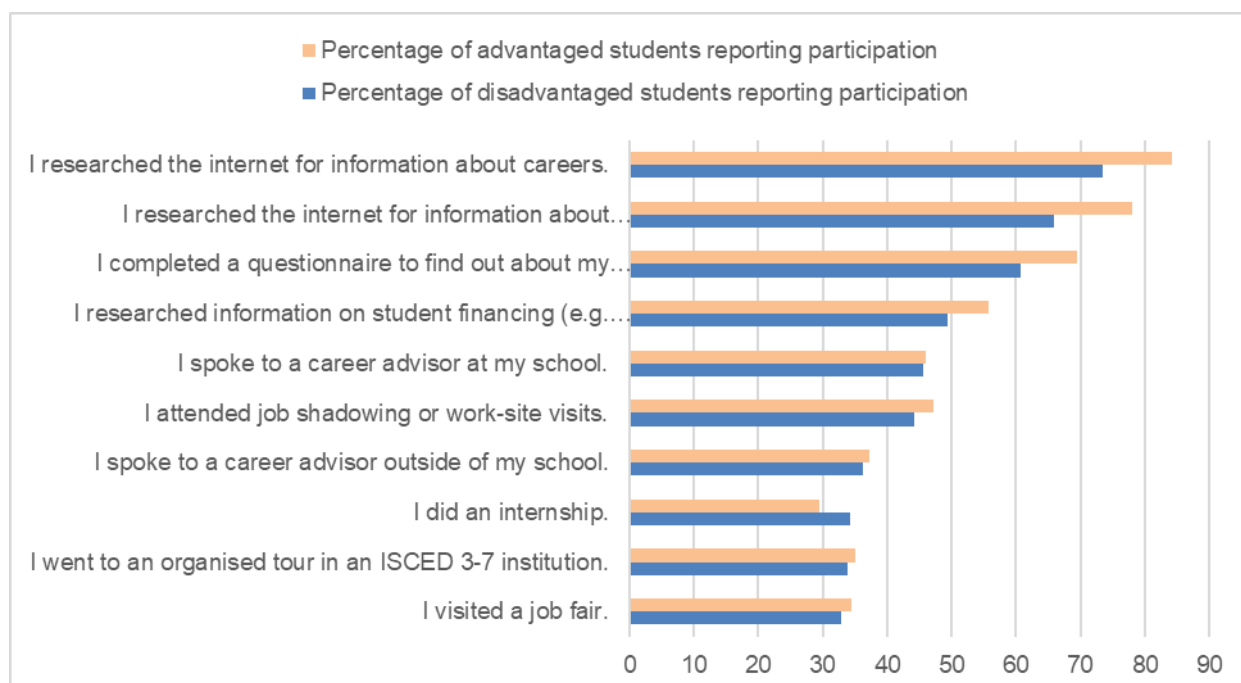
Social mobility or social reproduction?

In their conceptualisation of the relationship between career development and capitals, Stanley and Mann (2014^[102]) highlight the ways in which preceding levels of human, social and cultural capital can be expected to shape the benefits which students might anticipate from engagement in career development activities that involve employers and people in work. Conceiving a guidance activity as a means to build the capacity for career progression through access to information and experiences, students can be pictured as beginning with collections of resources which vary by family background which can be augmented through multiple guidance interventions over time taking place within and outside of schools. Noting for example the importance of preceding social connections in accessing desirable work placements where students and their families are tasked with sourcing opportunities, they argue that guidance provision can serve to either enhance social mobility or support social reproduction (LeGallais, 2008^[103]). The social composition of educational institutions can moreover be seen to provide structural disadvantages or advantages to students, as is the case where parents and alumni work in fields of strong interest to students.

Consequently, it might be expected that public education systems desiring greater equity in career progression will ensure that students from lower SES backgrounds to greater levels of guidance through their schools have access than their high SES peers, compensating for family-based gaps in knowledge and career-related opportunities. Analysis of PISA 2022 data from OECD countries shows however that on average it is students from the most socially advantaged quartile who are more likely than students from the least advantaged quartile to engage in career development activities.

Figure 4.5. Participation in career development activities

LAC average by ESCS



Note: 1. ESCS refers to the PISA index of economic, social and cultural status 2. A socio-economically advantaged (disadvantaged) student is a student in the top (bottom) quarter of ESCS in his or her own country/economy.

Source: PISA 2022 database

Addressing social inequalities through guidance interventions

Recent OECD reviews of practice in relation to the capacity of guidance systems to challenge social inequalities identify particularly valuable provision in terms of four areas: providing more intense support; developing professional capacity and providing dedicated resources; building social capital; and, developing a critical understanding of personal relationships with the labour market (OECD, 2024^[83]).

Given the greater dependence of low ESCS students on their schools for career development, effective systems will ensure a strong baseline of provision for all students and as PISA 2022 data illustrate considerable opportunity exists for increasingly the availability of guidance through schools. In analysis from Korea (Lee et al., 2021^[104]) found that when students receive more career education, the link between competence in career management and social background weakens with positive impacts strongest when students express satisfaction with the guidance received. By beginning guidance activities for all students at an earlier age and focusing on the development of individuals' capabilities to understand the possibilities available to them, as found in a Danish study at lower secondary level (Skovhus, 2016^[105]), the capacity of low SES students to take greater agency over their career journeys can also be seen to grow. A number of longitudinal studies have moreover found that students in greatest need of guidance do gain more from it than higher SES peers, suggesting a compensatory effect as lower SES peers benefit disproportionately from provision of new information (Mann, Percy and Kashefpakdel, 2018^[106]; Resnjanskij, 2023^[107]). Such an effect is also apparent in ongoing analyses of PISA data.

In some systems students experiencing higher levels of socio-economic disadvantage can expect greater levels of guidance. In Ireland notably, schools serving lower SES students can expect greater financial resources. Within the Delivering Equality of Opportunity in Schools (DEIS) programme, eligible secondary schools receive funding for 44 hours of weekly dedicated staff time to support guidance activities. By contrast, weekly funding for more advantaged schools amounts to 18 hours. DEIS schools are expected to provide greater provision, including more 1-2-1 interactions with guidance counsellors, more engagement with employers and tertiary institutions, greater integration of career learning within academic subjects and engagement of families (OECD, 2023^[96]).

Further means of enhancing the progression of disadvantaged students towards successful careers lies in the provision of career pathways where students typically aged 15-18 undertake a programme of study focused around a broad vocational sector such as healthcare or Information Technology. They engage in programmes rich in work-related and work-based learning designed to help students develop human, social and cultural capital that will ease entry into related tertiary programmes or post-secondary training provision. Importantly, such programmes operate within general secondary education, commonly over one day a week. They allow students to explore a vocational area of interest without shutting down other possible options (Herdman, 2024^[108]). In longitudinal studies, participation in such programmes is commonly associated with better ultimate employment outcomes (Herdman, 2024^[108]) (Covacevich et al., 2021^[90]). The results of a large scale randomised control trial of the US Career Academies programme for example show that eight years after completing high school, participating students enjoyed wage premiums of 8% over a relevant control sample of peers with students whose personal characteristics suggested the highest risks of non-completion of upper secondary education gaining the greatest benefits (Kemple, 2008^[109]).

Programmes specifically designed to enhance the social capital of students can also be targeted at student groups in greater need. Here, online provision provides a convenient mechanism for enhancing opportunities for students. In the UK for example the national [Inspiring the Future](#) programme which is responsible for millions of interactions between students and people in work deliberately excludes fee-paying schools from participation in a free programme that targets campaigns on low-income areas such as seaside towns and former mining areas. In Finland, [Virtual TET](#) is a one-week period of familiarisation with working life where students combine exploration of vocational sectors and workplaces

while undertaking work assignments. This provides students with the opportunity to engage with workplaces not easily accessible within their locality. In France, [JobIRL](#) allows students to communicate online with mentors to explore their career ambitions. While evaluations of online provision are currently limited, such initiatives enhance the possibility of students gaining access to experiences and sources of advice not easily found within immediate social circles and/or geographic locations (OECD, 2024^[83]).

In many jurisdictions, career guidance is left until secondary school and often concentrated in the years linked to key decision-making points and immediate entry to the labour market. However, considerable evidence suggests that young people develop their career identities, aspirations and career thinking much earlier in life and that early aspirations are influenced by socio-economic status (OECD, 2024^[83]). This creates a strong rationale for starting institutional career education and guidance early to disrupt processes of social and occupational reproduction linked to socially constructed expectations and assumptions that may be locked in by the later years of secondary school.

In response, a growing number of countries have introduced policies to increase primary-age participation in guidance, creating opportunities for students to begin thinking about their potential futures in work and to better see the connections between what they do in the classroom and the working world (OECD, 2024^[83]). Such initiatives can be expected to reduce the likelihood of students ignoring or ruling out potential pathways without due consideration. The Swedish [Welcome to the university!](#) programme for example seeks to break the cycle of reproduction which sees the children of higher educated parents following their parents into university while other children are less likely to make the choice. The programme aims to demystify the idea of higher education early on in compulsory schooling (OECD, 2024^[83]).

In the Canadian province of New Brunswick, students are expected to develop critical perspectives on the operation of the labour market and how it might relate to them in relation to different aspects of their personal identity, including such factors as disability, gender, sexual orientation, migrant status and SES. The New Brunswick Career Education framework, co-designed with the OECD, is intended to provide students with a realistic understanding of the labour market to underpin psychological resiliency within transitions (New Brunswick Department of Education and Early Childhood Development, 2023^[110]). Drawing on conceptions of critical consciousness (Diemer, 2009^[111]), the framework anticipates students entering the labour market with their eyes open to its challenges as well as its opportunities, particularly with regard to social inequalities to help students become better equipped to deal with its economic and psychological challenges. Students for example are expected to learn about how the structure of labour market can work against good transitions for many young people despite their own best intentions. The Career Education Framework is structured around statements articulating the expected student understanding at different ages. These include:

- I have learned why it might be harder for some people to secure their desired careers (Grades 6-8)
- I can explain why some people might face additional barriers in securing their desired career pathways (Grades 9-12)

Students are expected to be critical in their understanding of how the operation of the labour market influences individual outcomes, but also to identify resources of potential value to smooth transitions. Learners are encouraged to think about the diversity of experiences that people have in the labour market, going beyond individual approaches to career development to consider the possibility of changing their career environment:

- I have learned that not everybody works in a full-time permanent job and that people are working in different ways because they want to or because they have no choice (Grades 6-8)

- I have learned that there are protections that exist to ensure workplaces are free from discrimination (Grades 6-8)
- I have shared my ideas on how inequities may be solved (Grades 6-8)
- I can identify how individual and collective actions can help create a fairer working world (including the role of labour unions) (Grades 9-12)
- I have learned about the legislative protections that exist to ensure employment processes (recruitment, promotion, assignment, and termination) are free from discrimination (Grade 9-12) (New Brunswick Department of Education and Early Childhood Development, 2023^[110])

Where fully successful, it will be expected that programmes designed to enhance social mobility will not only support the greater progression of low SES students into competitive high status ISCO 1 and 2 professions, but also facilitate the entry of high SES students into a wider range of professions better linked to their personal interests and skills. In Canada, a long-term randomised control trial has followed high school students through and beyond a four-year programme of additional support in career development and higher education planning. The *Explore Your Horizons* programme was conducted in 30 New Brunswick high schools and involved over 4 000 students who were randomly assigned to two groups. A first group participated in 20 after-school workshops designed to help them understand the importance of career planning, explore educational and career options and transitions from high school to tertiary education. The workshops actively engaged parents, included a focus on resilient life skills and engaged post-secondary students. The high school students also had access to media materials about career planning. A second group simply received additional financial support on enrolment in tertiary education. Following the students up to age 29, significant positive results were identified in relation to tertiary enrolment, graduation rates and average earnings of the first group. That group was divided moreover into two halves based on parental income. Linked to the intervention, the tertiary enrolment rates of higher income students were seen to drop (if modestly), while that of lower income students rose significantly, leading to a substantial decrease in the gap between the two groups in enrolment in four-year programmes of tertiary education (Renée, 2023^[112]). See also: (Social Research and Demonstration Corporation, 2009^[113]).

The New Brunswick Career Education Framework includes items that prompt guidance counsellors, teaching staff, students and their families to consider whether individual students may be in need of additional support. In this, the province draws upon an adaptation of a Response to Intervention model used widely across educational provision to identify students in greater academic need. The model is based upon three categories of intervention: interventions aimed at all students (Tier 1), interventions aimed at some students in small groups, for example a group working on the development of social and emotional competencies (Tier 2), and interventions aimed at a few students delivered on an individual basis, perhaps through one-to-one counselling (Tier 3). The approach points towards personalised guidance provision that acknowledges students may anticipate additional barriers as they seek to convert their human capital into successful careers.

Towards fully personalised guidance

In the twentieth century, the employment outcomes of young people were typically heavily shaped by their biographical characteristics. Social class, gender and ethnicity notably served to track young people through education systems into predictable roles in the labour market. Over the last two generations in many OECD countries, more individualistic approaches have become apparent, as growing numbers of students from all social backgrounds have stayed on in upper secondary and tertiary education. Increasingly aspiring to a small number of professional occupations, students engage in what is ostensibly a fair competition for employment. However, as analysis of large data sets shows, students are not equally

prepared to activate their qualifications and experiences to their fullest extent within the labour market. High aspirations are widespread, if not universal, but access to useful resources to enable progression remains tied to socio-economic background. Career guidance systems can compensate for gaps in knowledge and resources that enable confident progression and these can be productively conceptualised through capitals analysis. While attention in this context is most heavily focused on what this means for entry into high status professions by young people low SES backgrounds, it is not the full story. Within a socially mobile society, young people should be encouraged and enabled to explore the breadth of the labour market and helped by their schools to understand and progress towards careers in which they feel greatest confidence of securing fulfilling employment. By implication, this will mean action both to raise understanding of the professions among low SES students, but also initiatives to ensure that high SES students feel enabled to pursue careers in fields such as the skilled trades. In this, the guidance community can do little to influence the quality of jobs, but it can ensure that students gain informed understanding of them through trusted and timely interventions. New insights from longitudinal data provide useful benchmarks in this regard and the growing use of digital technologies within guidance provides considerable opportunity to enhance personalised provision. Digital delivery remains very poorly evaluated however and this is a priority for further research as is the need for a more sophisticated understanding of the desirable quantity and quality of interventions of all types. Further analysis is also required to better understand intersectionality in the career development of students as other personal characteristics, most notably gender, ethnicity and sexual orientation, can also be seen to hinder career progression.

Conclusions

Young people from low SES backgrounds face additional barriers as they seek to convert their qualifications and experience into successful employment. They encounter particular challenges in seeking to enter high status jobs. The barriers they face can be productively conceptualised in terms of economic, human, social and cultural capital accumulation. Schools can help to build valuable resources through programmes of career guidance, but to be successful they must actively respond to predictable barriers relating to access to trusted information and useful experiences. PISA shows a need for socially focused interventions. Career uncertainty and confusion is shaped by social background. Socially disadvantaged students are also less likely to engage in most commonplace career development activities. Equitable guidance systems will target greater provision at low SES students and aim ultimately to provide personalised provision to all students, encouraging and enabling understanding of, and progression towards, careers promising greatest personal fulfilment. Insights from longitudinal data provide new opportunities for more scientific and strategic approaches to delivering effective provision.

References

- Aleksynska, M. and A. Kolev (2021), "Education-occupation mismatch in the context of informality and development", *OECD Development Centre Working Papers*, No. 346, OECD Publishing, Paris, <https://doi.org/10.1787/3291e65c-en>. [134]
- Archer, L. (2015), "'Science capital': A conceptual, methodological, and empirical argument for extending bourdieusian notions of capital beyond the arts", *Journal of Research in Science Teaching*, Vol. 52/7, pp. 922-948. [100]
- Arias Ortiz, E. et al. (2024), *El estado de la educación en América Latina y el Caribe 2023*, Banco Interamericano de Desarrollo, <https://doi.org/10.18235/0005515>. [65]

- Arias Ortiz, E. et al. (2024), *The State of Education in Latin America and the Caribbean 2023*, [12]
<https://publications.iadb.org/en/state-education-latin-america-and-caribbean-2023>.
- Arnold, J. et al. (2024), "Towards better social protection for more workers in Latin [35]
 America: Challenges and policy considerations", *OECD Economics Department Working
 Papers*, No. 1804, OECD Publishing, Paris, <https://doi.org/10.1787/76a04c6f-en>.
- Bourdieu, P. (1986), *The forms of capital*, pp. 241-258. [85]
- Broecke, S., G. Quintini and M. Vandeweyer (2017), "Explaining international differences in [128]
 wage inequality: Skills matter", *Economics of Education Review*, Vol. 60, pp. 112-124,
<https://doi.org/10.1016/j.econedurev.2017.08.005>.
- Brown, C., T. Hooley and T. Wond (2020), "Building career capital: developing business leaders' [86]
 career mobility", *Career Development International*, Vol. 25/5, pp. 445-459,
<https://doi.org/10.1108/CDI-07-2019-0186>.
- Brunner, J. (2013), "The Rationale for Higher Education Investment in Ibero-America", *OECD [76]
 Development Centre Working Papers*, No. 319, OECD Publishing, Paris,
<https://doi.org/10.1787/5k40d6717l8x-en>.
- Brunori, P., F. Ferreira and G. Neidhöfer (2023), *Inequality of Opportunity and Intergenerational [8]
 Persistence in Latin America*, [https://publications.iadb.org/en/inequality-opportunity-and-
 intergenerational-persistence-latin-america](https://publications.iadb.org/en/inequality-opportunity-and-intergenerational-persistence-latin-america).
- Busso, M. and J. Messina (2020), *The Inequality Crisis: Latin America and the Caribbean at the [7]
 Crossroads*, [https://publications.iadb.org/en/the-inequality-crisis-latin-america-and-the-
 caribbean-at-the-crossroads](https://publications.iadb.org/en/the-inequality-crisis-latin-america-and-the-caribbean-at-the-crossroads).
- CAF (2022), *Inherited inequalities: The role of skills, employment, and wealth*, [9]
<https://www.caf.com/media/4660888/red2022-re-eng.pdf>.
- Chetty, R. (2022), "Social capital I: measurement and associations with economic mobility", [88]
Nature, Vol. 608, pp. 108-121.
- Covacevich, C. et al. (2021), "Indicators of teenage career readiness: An analysis of longitudinal [90]
 data from eight countries", *OECD Education Working Papers*, No. 258, OECD Publishing,
 Paris, <https://doi.org/10.1787/cec854f8-en>.
- De La Mata, D. (2023), "The role of skills, employment, and wealth in the opportunities of new [33]
 generations."
- Diemer, M. (2009), "Pathways to occupational attainment among poor youth of color: The role of [111]
 sociopolitical development", *The Counseling Psychologist*, Vol. 39, pp. 6-35.
- ECLAC (2024), *Preventing and reducing school dropout in Latin America and the Caribbean*. [55]
- ECLAC (2023), *Panorama Regional en Educación*, [58]
https://www.cepal.org/sites/default/files/presentations/presentacion_d_trucco_cepal.pdf.
- ECLAC, UNESCO and UNICEF (2022), *Education in Latin America and the Caribbean at a [56]
 crossroads*.

- ECLAC, UNESCO, UNICEF (2024), “Education in Latin America and the Caribbean at a Crossroads: Regional Monitoring Report SDG4—Education 2030”, *Comparative Education Review*, Vol. 68/2, pp. 312-314, <https://doi.org/10.1086/730227>. [66]
- Encinas-Martín, M. and M. Cherian (2023), *Gender, Education and Skills: The Persistence of Gender Gaps in Education and Skills*, OECD Skills Studies, OECD Publishing, Paris, <https://doi.org/10.1787/34680dd5-en>. [47]
- Ferranti, G. (2004), *Inequality in Latin America and the Caribbean: Breaking with History?*. [142]
- Friedman, S. and L. Laurison (2019), *The Class Ceiling: Why it pays to be privileged*, Policy Press. [84]
- Germán Feierherd, P. (2023), *The Pink Tide and Income Inequality in Latin America*, Cambridge University Press. [3]
- Granovetter, M. (1990), *Getting a job: a study of contacts and careers*, Harvard University Press. [97]
- Hanushek, E. et al. (2015), “Returns to skills around the world: Evidence from PIAAC”, *European Economic Review*, Vol. 73, pp. 103-130, <https://doi.org/10.1016/j.euroecorev.2014.10.006>. [127]
- Herdman, P. (2024), *Innovation in career pathways across five countries*, OECD Publishing. [108]
- Hout, M. and T. DiPrete (2006), “What we have learned: RC28’s contributions to knowledge about social stratification”, *Research in Social Stratification and Mobility*, Vol. 24/1, pp. 1-20, <https://doi.org/10.1016/j.rssm.2005.10.001>. [34]
- IDB (2024), [www.iadb.org, https://www.iadb.org/en/news/complexities-inequality-latin-america-and-caribbean#:~:text=March%2006%2C%202024,for%20developed%20countries%20in%20OECD](https://www.iadb.org/en/news/complexities-inequality-latin-america-and-caribbean#:~:text=March%2006%2C%202024,for%20developed%20countries%20in%20OECD). [141]
- IDB (2023), *América Latina y el Caribe en PISA 2022: ¿Cómo le fue a la región?*, <https://publications.iadb.org/publications/spanish/viewer/America-Latina-y-el-Caribe-en-PISA-2022-omo-le-fue-a-la-region.pdf>. [137]
- IDB (2023), *América Latina y el Caribe en PISA 2022: ¿Cuántos tienen bajo desempeño?*, <https://publications.iadb.org/publications/spanish/viewer/America-Latina-y-el-Caribe-en-PISA-2022-cuantos-tienen-bajo-desempeno.pdf>. [138]
- ILO (2023), *2023 Labour Overview*. [48]
- ILO (2014), *Recent experiences of formalization in Latin America and the Caribbean*. [49]
- IMF (2024), *Regional Economic Outlook for the Western Hemisphere*, <https://www.imf.org/en/Publications/REO/WH/Issues/2024/04/19/regional-economic-outlook-western-hemisphere-april-2024#:~:text=The%20Western%20Hemisphere&text=Growth%20is%20now%20moderating%2C%20from,policies%20aimed%20at%20curbing%20inflation>. [28]
- IMF (2024), *Regional Economic Outlook for the Western Hemisphere*. [46]

- Inter-American Development Bank (2024), *The Complexities of Inequality in Latin America and the Caribbean*, <https://www.iadb.org/en/news/complexities-inequality-latin-america-and-caribbean>. [4]
- Jenkins, H. (2017), *Social Mobility and Economic Success*. [52]
- Jones, S., A. Mann and K. Morris (2016), "The 'Employer Engagement Cycle' in Secondary Education: analysing the testimonies of young British adults", *Journal of Education and Work*, Vol. 29/7, pp. 834-856, <https://doi.org/10.1080/13639080.2015.1074665>. [101]
- Kashefpakdel, E. (2016), "Career education that works: an economic analysis using the British Cohort Study", Vol. 30/3, pp. 217-234. [99]
- Kemple, J. (2008), *Career Academies: long-term impacts on labour market outcomes, educational attainment, and transitions to adulthood*, MDRC. [109]
- Kim, H. (2015), *Resetting Education Policy to Restore Social Mobility*. [51]
- Lafuente, E. (ed.) (2022), *¿Como reconstruir la educación postpandemia? Soluciones para cumplir con la promesa de un mejor futuro para la juventud*, Inter-American Development Bank, <https://doi.org/10.18235/0004241>. [143]
- Lee, Y. et al. (2021), "Equity in career development of high school students in South Korea: The role of school career education.", *Education Sciences*, Vol. 11/1, p. 20, <https://doi.org/10.3390/educsci11010020>. [104]
- LeGallais, T. (2008), *The work experience placements of secondary school students: widening horizons or reproducing social inequality?*, Birmingham City University, https://www.educationandemployers.org/wp-content/uploads/2014/06/the_work_experience_placements_of_secondary_school_students.pdf. [103]
- Lyche, C. (2010), "Taking on the Completion Challenge: A Literature Review on Policies to Prevent Dropout and Early School Leaving", *OECD Education Working Papers*, No. 53, OECD Publishing, Paris, <https://doi.org/10.1787/5km4m2t59cmr-en>. [68]
- Mann, A. (2024), *Teenage career development in England: A Review of PISA 2022 Data*. [94]
- Mann, A. (2021), *Career ready?: How schools can better prepare young people for working life in the era of COVID-19*, OECD Publishing, <https://doi.org/10.1787/e1503534-en>. [98]
- Mann, A. (2017), "Schools and the twenty-first century labour market: perspectives on structural change", *British Journal of Guidance and Counselling*, Vol. 45/2, pp. 208-218, <https://doi.org/10.1080/03069885.2016.1266440>. [89]
- Mann, A., C. Percy and E. Kashefpakdel (2018), *Socialised social capital: the capacity of schools to use careers provision to compensate for social capital deficiencies among teenagers*, Routledge, London. [106]
- McMahon, W. (1998), *Education and Growth in East Asia*. [19]
- Mercan, M. (2014), *The Effect of Education Expenditure on Economic Growth: The Case of Turkey*. [17]

- Mulakala, T. (2015), *Social Mobility: Experiences and Lessons from Asia*, KDI. [21]
- Nancy Birdsall, D. (1995), *Inequality and Growth Reconsidered: Lessons from East Asia*. [18]
- Neidhöfer, G., J. Serrano and L. Gasparini (2018), “Educational inequality and intergenerational mobility in Latin America: A new database”, *Journal of Development Economics*, Vol. 134, pp. 329-349, <https://doi.org/10.1016/j.jdeveco.2018.05.016>. [43]
- New Brunswick Department of Education and Early Childhood Development (2023), *Career Education Framework in New Brunswick*, <https://www2.gnb.ca/content/dam/gnb/Departments/ed/pdf/K12/FRL/nb-career-education-framework.pdf>. [110]
- OECD (2024), *About PIAAC*, <https://www.oecd.org/en/about/programmes/piaac.html>. [40]
- OECD (2024), *Challenging Social Inequality Through Career Guidance: Insights from International Data and Practice*, OECD Publishing, Paris, <https://doi.org/10.1787/619667e2-en>. [83]
- OECD (2024), *Education at a Glance*, OECD Publishing. [69]
- OECD (2024), *Government at a Glance: Latin America and the Caribbean 2024*, https://www.oecd.org/en/publications/government-at-a-glance-latin-america-and-the-caribbean-2024_4abdba16-en.html. [2]
- OECD (2024), *Government at a Glance: Latin America and the Caribbean 2024*, OECD Publishing, Paris, <https://doi.org/10.1787/4abdba16-en>. [139]
- OECD (2024), *Income inequality indicator*, <https://www.oecd.org/en/data/indicators/income-inequality.html>. [5]
- OECD (2024), *OECD Economic Surveys: Mexico 2024*, OECD Publishing, Paris, <https://doi.org/10.1787/b8d974db-en>. [73]
- OECD (2023), *Review Education Policies - Education GPS*, <https://gpseducation.oecd.org/revieweducationpolicies/#!node=&filter=all>. [16]
- OECD (2023), *Building Future-Ready Vocational Education and Training Systems*, OECD Reviews of Vocational Education and Training, OECD Publishing, Paris, <https://doi.org/10.1787/28551a79-en>. [123]
- OECD (2023), “Career talks with guest speakers: A guide to delivering an effective career development activity”, *OECD Education Policy Perspectives*, No. 69, OECD Publishing, Paris, <https://doi.org/10.1787/93594cb3-en>. [96]
- OECD (2023), *Education at a Glance 2023*, https://www.oecd-ilibrary.org/education/education-at-a-glance-2023_e13bef63-en. [14]
- OECD (2023), *Education at a Glance 2023: OECD Indicators*, OECD Publishing, Paris, <https://doi.org/10.1787/e13bef63-en>. [71]
- OECD (2023), *Main Findings from the 2022 OECD Risks that Matter Survey*, OECD Publishing, Paris, <https://doi.org/10.1787/70aea928-en>. [114]

- OECD (2023), *Multi-dimensional Review of El Salvador: Strategic Priorities for Robust, Inclusive and Sustainable Development*, OECD Development Pathways, OECD Publishing, Paris, <https://doi.org/10.1787/2f3d5e1f-en>. [64]
- OECD (2023), *OECD Skills Outlook 2023: Skills for a Resilient Green and Digital Transition*, OECD Publishing, Paris, <https://doi.org/10.1787/27452f29-en>. [115]
- OECD (2023), *PISA 2022 Results (Volume I): The State of Learning and Equity in Education*, <https://doi.org/10.1787/53f23881-en>. [57]
- OECD (2023), *PISA 2022 Results (Volume I): The State of Learning and Equity in Education*, PISA, OECD Publishing, Paris, <https://doi.org/10.1787/53f23881-en>. [116]
- OECD (2023), *PISA 2022: Resultados para América Latina y el Caribe*, https://www.cepal.org/sites/default/files/presentations/presentacion_d_salinas_ocde.pdf. [79]
- OECD (2023), *Skills in Latin America: Insights from the Survey of Adult Skills (PIAAC)*, OECD Skills Studies, OECD Publishing, Paris, <https://doi.org/10.1787/5ab893f0-en>. [30]
- OECD (2022), *Education at a Glance 2022: OECD Indicators*, OECD Publishing, Paris, <https://doi.org/10.1787/3197152b-en>. [72]
- OECD (2022), *Gender Equality in Peru: Towards a Better Sharing of Paid and Unpaid Work*, Gender Equality at Work, OECD Publishing, Paris, <https://doi.org/10.1787/e53901b5-en>. [63]
- OECD (2022), *Pathways to Professions: Understanding higher vocational and professional tertiary education systems*, <https://doi.org/10.1787/a81152f4-en>. [124]
- OECD (2022), *Skills for the Digital Transition: Assessing Recent Trends Using Big Data*, OECD Publishing, Paris, <https://doi.org/10.1787/38c36777-en>. [37]
- OECD (2021), *Education at a Glance 2021*, https://www.oecd-ilibrary.org/education/education-at-a-glance-2021_b35a14e5-en. [13]
- OECD (2021), *Education at a Glance 2021: OECD Indicators*, OECD Publishing, Paris, <https://doi.org/10.1787/b35a14e5-en>. [146]
- OECD (2021), *Experiencing the workplace: the importance and benefits for students*, OECD Publishing, <https://doi.org/10.1787/b679d759-en>. [95]
- OECD (2021), *Future-Ready Adult Learning in Latin America*, https://www.oecd.org/en/publications/future-ready-adult-learning-in-latin-america_18d2f2f1-en.html. [10]
- OECD (2021), *Future-Ready Adult Learning in Latin America. Action Plan*. [44]
- OECD (2021), *How's Life in Latin America? : Measuring Well-being for Policy Making*, https://www.oecd-ilibrary.org/social-issues-migration-health/how-s-life-in-latin-america_2965f4fe-en. [1]
- OECD (2021), *How's Life in Latin America?: Measuring Well-being for Policy Making*, OECD Publishing, Paris, <https://doi.org/10.1787/2965f4fe-en>. [54]

- OECD (2021), *OECD Skills Outlook 2021: Learning for Life*, OECD Publishing, <https://doi.org/10.1787/0ae365b4-en>. [117]
- OECD (2021), *OECD Skills Outlook 2021: Learning for Life*, OECD Publishing, Paris, <https://doi.org/10.1787/0ae365b4-en>. [29]
- OECD (2020), *Dream Jobs? Teenagers' Career Aspirations and the Future of Work*, <https://www.oecd.org/education/dream-jobs-teenagers-career-aspirations-and-the-future-of-work.htm>. [93]
- OECD (2020), *Education at a Glance 2020: OECD Indicators*, OECD Publishing, Paris, <https://doi.org/10.1787/69096873-en>. [122]
- OECD (2020), *OECD Employment Outlook 2020: Worker Security and the COVID-19 Crisis*, OECD Publishing, Paris, <https://doi.org/10.1787/1686c758-en>. [121]
- OECD (2019), *How are PISA results related*. [59]
- OECD (2019), *Getting Skills Right: Future-Ready Adult Learning Systems*, OECD Publishing, Paris, <https://doi.org/10.1787/9789264311756-en>. [125]
- OECD (2019), *PISA 2018 Assessment and Analytical Framework*, PISA, OECD Publishing, Paris, <https://doi.org/10.1787/b25efab8-en>. [77]
- OECD (2019), *PISA 2018 Assessment and Analytical Framework*, <https://doi.org/10.1787/b25efab8-en>. [78]
- OECD (2019), *Skills Matter: Additional Results from the Survey of Adult Skills*, https://www.oecd-ilibrary.org/education/skills-matter_1f029d8f-en. [20]
- OECD (2019), *Skills Matter: Additional Results from the Survey of Adult Skills*, OECD Skills Studies, OECD Publishing, Paris, <https://doi.org/10.1787/1f029d8f-en>. [39]
- OECD (2019), *Survey of Adult Skills (PIAAC)*, <http://www.oecd.org/skills/piaac/publicdataandanalysis/>. [118]
- OECD (2019), *Tackling Vulnerability in the Informal Economy*, https://www.oecd-ilibrary.org/development/tackling-vulnerability-in-the-informal-economy_939b7bcd-en. [15]
- OECD (2018), *A Broken Social Elevator? How to Promote Social Mobility*, OECD Publishing, Paris, <https://doi.org/10.1787/9789264301085-en>. [32]
- OECD (2018), *Equity in Education: Breaking Down Barriers to Social Mobility*, PISA, OECD Publishing, Paris, <https://doi.org/10.1787/9789264073234-en>. [42]
- OECD (2018), *Opportunities for All: A Framework for Policy Action on Inclusive Growth*, OECD Publishing, Paris, <https://doi.org/10.1787/9789264301665-en>. [61]
- OECD (2018), *PISA 2018 Results (Volume I): What Students Know and Can Do*, OECD Publishing, Paris, <https://doi.org/10.1787/19963777>. [147]
- OECD (2017), *OECD Economic Surveys: Argentina 2017: Multi-dimensional Economic Survey*, OECD Publishing, Paris, https://doi.org/10.1787/eco_surveys-arg-2017-en. [67]

- OECD (2017), *To what extent does parents' education influence their children's educational attainment?*, <https://www.oecd-ilibrary.org/docserver/eag-2017-10-en.pdf?expires=1728389065&id=id&accname=guest&checksum=C2C594C3AAF04FEC5984BE4E3002EE60>. [26]
- OECD (2016), *PISA 2015 Results (Volume I): Excellence and Equity in Education*, PISA, OECD Publishing, Paris, <https://doi.org/10.1787/9789264266490-en>. [81]
- OECD (2016), *Skills Matter: Further Results from the Survey of Adult Skills*, OECD Skills Studies, OECD Publishing, Paris, <https://doi.org/10.1787/9789264258051-en>. [41]
- OECD (2015), "Higher education in Latin America: Challenges and opportunities", in *E-Learning in Higher Education in Latin America*, OECD Publishing, Paris, <https://doi.org/10.1787/9789264209992-4-en>. [74]
- OECD (2015), *Survey of Adult Skills (PIAAC)*, <http://www.oecd.org/skills/piaac/publicdataandanalysis/>. [119]
- OECD (2013), *OECD Skills Outlook 2013: First Results from the Survey of Adult Skills*, OECD Publishing, Paris, <https://doi.org/10.1787/9789264204256-en>. [38]
- OECD (2013), *PISA 2012 Results: Excellence through Equity (Volume II)*, https://www.oecd-ilibrary.org/education/pisa-2012-results-excellence-through-equity-volume-ii_9789264201132-en. [27]
- OECD (2012), "Does Money Buy Strong Performance in PISA?", *PISA in Focus*, No. 13, OECD Publishing, Paris, <https://doi.org/10.1787/5k9fhmfzc4xx-en>. [82]
- OECD (2012), *OECD Survey of Adult Skills (PIAAC)*, <http://www.oecd.org/skills/piaac/publicdataandanalysis/>. [120]
- OECD (2010), *Education Policies for Upward Social Mobility in Latin America*, https://www.oecd.org/en/publications/2010/11/education-policies-for-upward-social-mobility-in-latin-america_g17a1f51.html. [126]
- OECD (2010), *Education, Social Mobility and the Middle Sectors*, https://www.oecd-ilibrary.org/development/latin-american-economic-outlook-2011/education-social-mobility-and-the-middle-sectors_leo-2011-9-en. [11]
- OECD (2010), *Latin America Economic Outlook 2011: How Middle Class is Latin America*, <http://dx.doi.org/leo-2011-en>. [144]
- OECD (2010), *Latin American Economic Outlook 2011: How Middle-Class Is Latin America?*, OECD Publishing, Paris, <https://doi.org/10.1787/leo-2011-en>. [75]
- OECD (2010), *The high cost of low education performance*. [60]
- OECD and ILO (2020), *Social Dialogue, Skills and COVID-19*. [133]
- OECD/CAF/ECLAC (2016), *Latin American Economic Outlook 2017: Youth, Skills and Entrepreneurship*, OECD Publishing, Paris, <https://doi.org/10.1787/leo-2017-en>. [145]
- OECD et al. (2023), *Latin American Economic Outlook 2023: Investing in Sustainable Development*, OECD Publishing, Paris, <https://doi.org/10.1787/8c93ff6e-en>. [140]

- OECD et al. (2019), *Latin American Economic Outlook 2019: Development in Transition*, OECD Publishing, Paris, <https://doi.org/10.1787/g2g9ff18-en>. [135]
- OECD et al. (2022), *Latin American Economic Outlook 2022: Towards a Green and Just Transition*, OECD Publishing, Paris, <https://doi.org/10.1787/3d5554fc-en>. [36]
- OECD, E. (2023), *Latin American Economic Outlook 2023. Investing in Sustainable Development*, <https://doi.org/10.1787/20725140>. [136]
- Oxera Consulting LLP (2020), *The impact of social mobility on productivity*, https://www.suttontrust.com/wp-content/uploads/2020/01/Oxera-report_WEB_FINAL.pdf. [131]
- Patrinos, G. (2004), *Returns to Investment in Education: A Further Update*. [23]
- Perry, B. (2016), “Misalignment of Career and Educational Aspirations in Middle School: Differences across Race, Ethnicity, and Socioeconomic Status”, *Social Sciences*, Vol. 5/3, <https://doi.org/10.3390/socsci5030035>. [92]
- Renée, L. (2023), *The Long-Term Effects of Career Guidance in High School: Evidence from a randomised experiment*, https://economie.esq.ugam.ca/wp-content/uploads/sites/54/2023/03/Guidance_LRenee_2023.pdf. [112]
- Resnjanskij, S. (2023), *Mentoring erhöht die Ausbildungsbeteiligung benachteiligter Jugendlicher*, <https://www.ifo.de/DocDL/sd-2023-12-ZDG-berufseinstieg-wachstumsfaktor.pdf>. [107]
- Salvanes, K. and A. Bjorklund (2010), “Education and Family Background: Mechanisms and Policies”, *SSRN Electronic Journal*, <https://doi.org/10.2139/ssrn.1620398>. [45]
- Sehnbruch, K., M. Apablaza and J. Foster (2024), “Poor-Quality Employment: Who Is Deprived in Our Labour Markets?”, *LSE Public Policy Review*, Vol. 3/2, <https://doi.org/10.31389/lsepr.104>. [31]
- Skovhus, R. (2016), “A focus on educational choice has social justice consequences – an empirical study informed by Sen’s capability approach.”, *Journal of the National Institute of Career Education and Counselling*, Vol. 36, pp. 54-60, <https://doi.org/10.20856/jnic>. [105]
- Social Research and Demonstration Corporation (2009), *Future to discover: interim impacts report*, https://srdc.org/wp-content/uploads/2022/07/FTD_IIR_report_ENG.pdf. [113]
- Staff, J. (2010), “Uncertainty in early occupational aspirations: role exploration or aimlessness?”, *Social Forces*, Vol. 119, pp. 55-69, <https://doi.org/10.1353/sof.2010.0088>. [91]
- Stanley, J. and A. Mann (2014), *A theoretical framework for understanding employer engagement*, in Mann, A. et al. (eds), *Understanding employer engagement in education*, Routledge, London. [102]
- The Asia Foundation and Korea Development Institute (KDI) (2015), *Social Mobility: Experiences and Lessons from Asia*, The Asia Foundation. [129]
- Tomlinson, M. et al. (2022), “Developing graduate employability for a challenging labour market: the validation of the graduate capital scale”, *Journal of Applied Research in Higher Education*, Vol. 14/3, pp. 1193-1209. [87]

- Torche, F. (2014), "Intergenerational Mobility and Inequality: The Latin American Case", *Annual Review of Sociology*, Vol. 40/1, pp. 619-642, <https://doi.org/10.1146/annurev-soc-071811-145521>. [53]
- UNDP (2021), *Trapped? Inequality and Economic Growth in Latin America and the Caribbean*, <https://www.undp.org/latin-america/publications/trapped-inequality-and-economic-growth-latin-america-and-caribbean>. [6]
- UNESCO (2024), *The urgency of educational recovery in Latin America and the Caribbean*. [62]
- UNESCO (2005), *Guidelines for inclusion: ensuring access to education for all*, <https://unesdoc.unesco.org/ark:/48223/pf0000140224>. [25]
- UNICEF (2022), *Two years after: Saving a generation*, <https://www.unicef.org/lac/en/reports/two-years-after-saving-a-generation>. [24]
- Valenzuela, J. (2022), *Trajectory and policies for inclusion in higher education in Latin America and the Caribbean in the context of the pandemic*. [70]
- Willms, J. (2006), "Variation in socioeconomic gradients among cantons in French- and Italian-speaking Switzerland: Findings from the OECD PISA", *Educational Research and Evaluation*, Vol. 12(2), pp. 129-154. [80]
- World Bank (2024), *World Bank Open Data*, <https://data.worldbank.org/> (accessed on June 2024). [130]
- World Bank (2021), *World Development Indicators*, <https://databank.worldbank.org/source/world-development-indicators>. [22]
- World Bank (2020), *World Bank Enterprise Survey*, <https://prosperitydata360.worldbank.org/> (accessed on June 2024). [132]
- World Economic Forum (2020), *The Global Social Mobility Report 2020: Equality, Opportunity and a New Economic Imperative*, World Economic Forum, https://www3.weforum.org/docs/Global_Social_Mobility_Report.pdf. [50]

5

Bridging the Skills Gap: Enhancing Skills Through Vocational Education and Training (VET) and Regional Collaboration

This chapter discusses the importance of skills in tackling inequalities and ensuring that no-one is left behind in an increasingly interconnected and rapidly changing world. It looks at the performance of Latin America in different dimensions of skills development and use, and identifies key challenges for vocational education and training (VET) and lifelong learning in the region. It puts forward key policy directions for closing the skills gaps and discusses the potential benefits of a regional skills strategy for Latin America.

Introduction

Skills are the new currency. Skills are central to the capacity of countries and people to thrive in an increasingly interconnected and rapidly changing world. Skills systems have a key role to play to counteract rising inequalities and a lack of equal opportunities in OECD countries. Social mobility depends greatly on equipping individuals with the right skills at the right time. Skills are key for individuals and particularly vulnerable groups to adapt and succeed in labour markets and societies. Yet, most countries are facing increasing challenges to provide equal opportunities for children, as well as for those who have lost their jobs due to globalisation and technological change. The “Opportunities module” of the 2022 OECD Risks that Matter survey (OECD, 2023^[114]) shows that “improving equal access to education” and “retraining and upskilling” are among the top five policy measures to reduce economic inequalities that garner the highest approval among the 27 countries surveyed. Addressing social inequalities requires that skills systems need to be re-designed to provide coherent, permeable and attractive pathways for all learners, targeting in particular those who have so far failed to meaningfully engage in lifelong learning opportunities. Young people, and vulnerable groups, which are those who are most susceptible to changes in the labour market as skill requirements change due to megatrends and unexpected shocks, need to be empowered to create their own lifelong learning trajectories. Strong foundations should be provided early in life through early learning and formal education.

A number of ongoing global trends are making skills more important than ever for the success of economies and societies. Globalisation, digitalisation, technological change and automation, as well as trade wars between major global players and increasing political uncertainty are forcing countries to take a more strategic approach to their economic development. High performing skills systems that develop relevant skills for the future, and put those skills into effective use for society, help to build more resilient and adaptable economies and individuals, empowering them with the fundamental tools needed to thrive in our increasingly complex world. (OECD, 2023^[115])

Boosting productivity is of crucial importance to raising the living standards of the population, and strengthening the development and use of skills will be key to achieving this. As demonstrated by the Survey of Adult Skills (PIAAC), higher levels of skills are a crucial determinant of economic prosperity and social well-being. Better skills utilisation in firms is associated with higher productivity and lower staff turnover, and higher skills for workers is associated with higher salaries and job satisfaction as well as increased social participation.

However, because the demand for skills is likely to change in response to rapid technological innovations, investments in skills must be affordable and sustainable, thereby equipping individuals with skills that will make them resilient to changes in economy and society. Validating and certifying skills will be critical, thereby reflecting their relevance for individuals, economies, and societies by responding effectively to the implications of megatrends and unexpected shocks. Enhancing social mobility and reducing social inequalities are central to these efforts, ensuring that everyone, regardless of their background, has the opportunity to develop the skills needed for economic and social success.

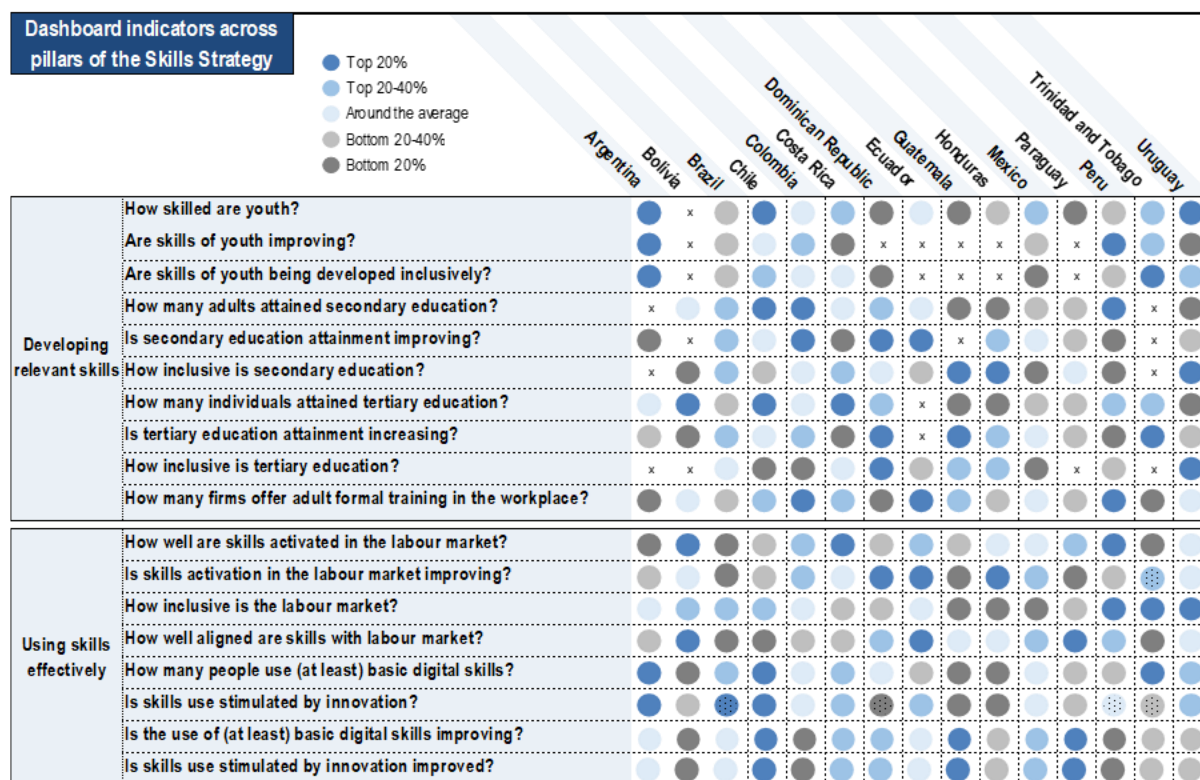
Skills in Latin America: A snapshot of strengths and weaknesses

Latin America has made enormous achievements in education and skills in recent decades. This has included substantial increases in the educational attainment of the population, and the expansion of general education, including a notable increase in access to tertiary education (including in some countries a rapid expansion of professionally-oriented short-cycle tertiary programmes). In the 10 years from 2010 to 2020, the overall enrolment rate in tertiary education across the region increased by 13 per cent from 41 to 54%.

Figure 5.1 below reports a snapshot of Latin America's comparative skills performance. The snapshot reports the relative performance Latin American countries across different dimensions, from the development of relevant skills for students and adults to the intensity of skills use in workplaces.

Figure 5.1. Skills performance varies among Latin American countries

Relative performance of Latin American countries on various skills indicators



Note: These summary indicators are calculated as a simple average of a range of underlying indicators. All underlying indicators have been normalised in a way that implies that a higher value and being among the "top 20%" reflects better performance. The "x" indicates insufficient or no available data, and dotted circles indicate missing data for at least one underlying indicator.

Despite recent progress towards more efficient and resilient education and skills systems, Latin America still faces important skills challenges.

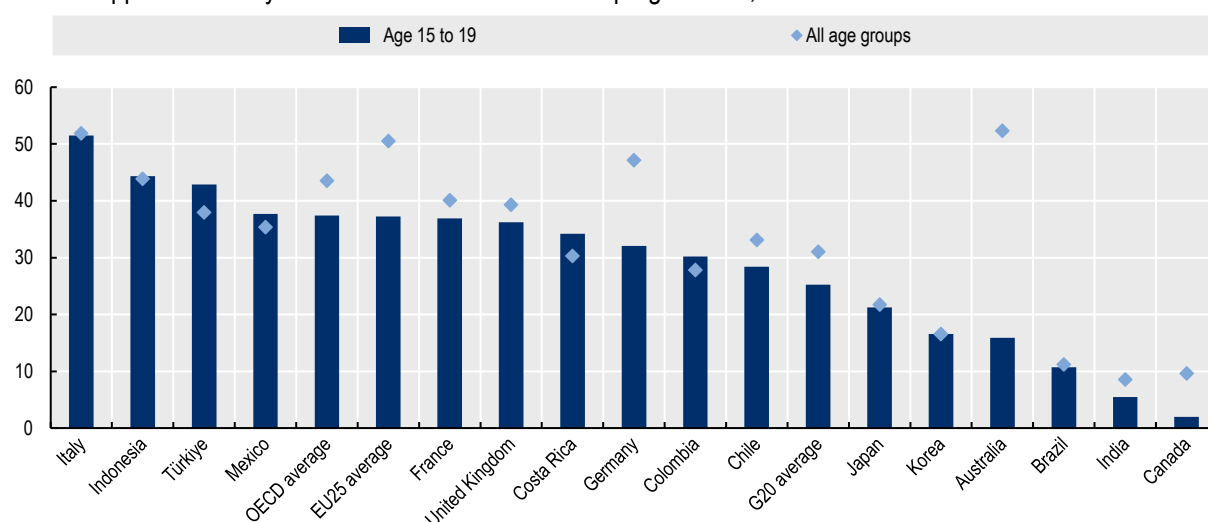
Regional performance from the OECD's Programme for International Student Assessment (PISA, see Chapter 3) is still well below the OECD average. All Latin American countries participating in PISA 2022 below OECD average mean performance on reading, mathematics and science, as well as below average shares of top performers and above average shares of low performers (OECD, 2023^[116]). This performance gap highlights the challenges the region faces in achieving parity with more developed education systems, and underscores the need for targeted interventions to enhance educational quality and equity.

Enrolment in upper-secondary VET programmes in Latin American OECD countries remains below the OECD average, see Figure 5.2. The share of upper-secondary education learners who are in vocational programmes is only 11% in Brazil, 28% in Colombia, 30% in Costa Rica, 33% in Chile and 35% in Mexico (compared to an OECD average of 44%). By contrast, some of these countries have a relatively well developed "higher VET system" – i.e. professionally oriented short-cycle tertiary programmes at ISCED

level 5. For example, in Chile and Colombia around 65% of all vocational students are enrolled at this level. Programmes at that level account for 39% in Chile and 44% in Colombia of first-time entrants into tertiary education, compared to only 19% on average across OECD countries (OECD, 2023^[71]).

Figure 5.2. A relatively low share of upper-secondary students in Latin American countries are enrolled in vocational programmes

Share of upper secondary students enrolled in vocational programmes, OECD and G20 countries



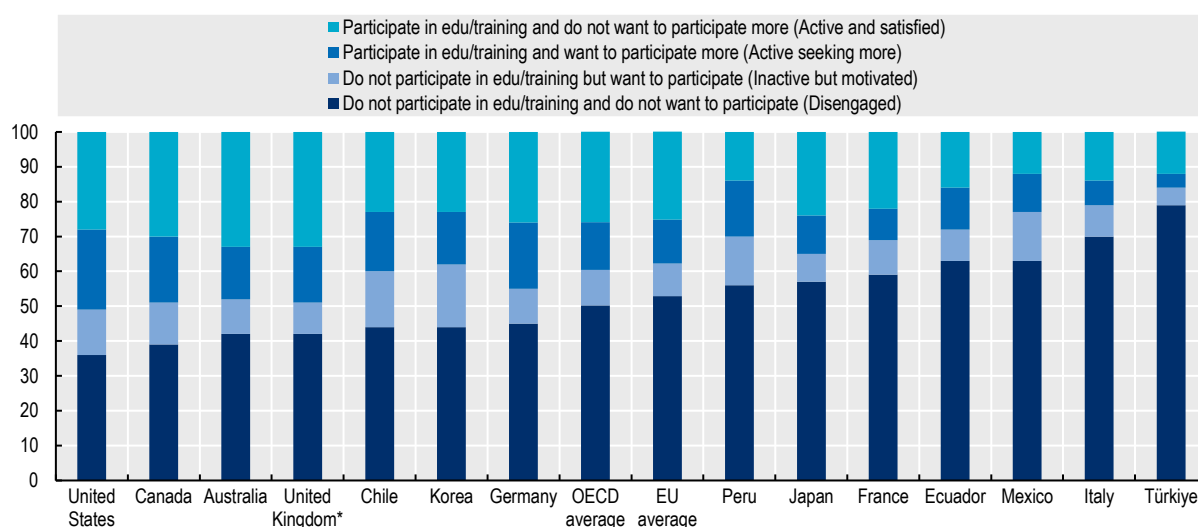
Source: OECD Education at a Glance 2023

A large proportion of adults lack basic digital problem-solving skills needed to thrive in a globalized and interconnected world. Data from the OECD's Survey on Adult Skills (PIAAC, see Chapter 2) indicates that 32% of adults in Mexico, and 52% of adults in Chile are unable to solve problems in a technology-rich environment at a basic level. In fact, many adults lack even the very basics to operate a digital device: the share of adults without computer experience or failing the PIAAC ICT core test amounts to 25% in Chile, 33% in Ecuador, 39% in Mexico and 43% in Peru. This digital divide exacerbates social inequalities, limiting opportunities for social mobility. In addition, many adults lack basic foundational skills – defined as literacy and numeracy skills – which are essential to be adaptable and resilient.

Participation rates in adult learning are strikingly low in several Latin American countries, as they are in many other OECD countries. Data from the Survey of Adult Skills (PIAAC) indicate that only 2 in 5 adults (40%) on average participate in job-related formal or non-formal training over the course of 12 months prior to being interviewed in PIAAC, see Figure 5.3. While some of these adults will be taking formal training, such as VET or higher education programmes, most of the training is non-formal (i.e. organised training that does not lead to a qualification from the formal education system). Looking at participation rates across countries shows considerable variation, also among countries in the Latin American region: Less than 30% of adults in Peru, Mexico and Ecuador participate in adult learning, compared to 40% of adults in Chile. Low educated adults and those in informal jobs typically have lower access to training. It is estimated that about 50% of jobs in Latin America are informal, which limits access and take-up of lifelong learning opportunities for adults.

Figure 5.3. Many adults in Latin American countries are disengaged from learning

Willingness to train and participation in adult learning, by country (OECD and G20 countries)



Note: Participation relates to formal and non-formal job-related adult learning over the 12 previous months. Countries are sorted by the share of the “disengaged” group in a given country. Countries are ranked in ascending order of the percentage of 25-65 year-olds having completed initial education who are in the “disengaged” group. *Data for the United Kingdom refer to England and Northern Ireland jointly.

Source: OECD (2021^[117]), using OECD (2019^[118]) (2015^[119]) (2012^[120]) Survey of Adult Skills (PIAAC) databases, <http://www.oecd.org/skills/piaac/publicdataandanalysis/>.

Bridging the skills gap

Megatrends such as globalisation, technological progress, population ageing, migration and climate change, are putting unprecedented pressures on skills systems globally. These megatrends are changing the skills demanded in the labour market and societies. Adapting to these shifts is essential to ensure social mobility and reduce inequalities. To thrive in a digital and interconnected global economy, young generations need to acquire new skills, and older generations need to up- and reskill. This entails identifying changing skills needs for different groups in rapidly changing societies, and creating education and training that are responsive to changing skills needs.

Reinforcing Vocational Education and Training (VET)

VET has been found to smoothen school-to-work transitions, with young adults with an upper-secondary VET degree having employment rates that are close to those of young adults with a tertiary degree in many countries (OECD, 2020^[121]). Work-based learning plays a key role in this respect. Evidence from European countries shows that young adults with a VET qualification have higher employment rates when they had work experience during their studies (OECD, 2020^[122]).

VET can serve a diverse group of young and adult learners, including those who aspire further learning and those who are less academically oriented or who are discouraged from learning in a traditional classroom setting. VET has been found to contribute to engaging students in the education system, with various studies finding a negative association between VET and dropout from secondary education (OECD, 2020^[121]). It can provide an interesting alternative to general education for students, and can therefore contribute to reducing dropout rates and to re-engaging early school leavers in the education system. To support the most vulnerable young students, various countries have put in place dedicated

support measures and/or target programmes, such as pre-apprenticeship programmes and/or shorter apprenticeship programmes that provide additional support and coaching (OECD, 2023^[123]).

Despite the many benefits of VET, in many countries VET struggles with a negative image and is sometimes seen as a last resort option. Strong career guidance services that raise awareness among students and their parents about VET and its labour market outcomes can contribute to changing the perception around VET. Moreover, students should be informed about the opportunities for progression in higher education and further learning after upper-secondary VET. In this respect, VET should never be a dead-end, and VET students need to have effective pathways into higher-level programmes. Across OECD countries, on average, about two-thirds of students enrolled in upper secondary VET are receiving an education that theoretically provides them with the opportunity to directly enter a higher education level, often short-cycle tertiary but also at bachelor's or equivalent level (OECD, 2022^[124]). In some countries, VET students need to go through a bridging progress to prepare them for further studies. Some VET students might need additional courses or other type of support to be successful in higher education. Such bridging programmes, additional courses and support measures may contribute to better outcomes in higher education, as today completion rates in bachelor programmes are significantly lower for students with a VET background than those with a general education background in several OECD countries (OECD, 2022^[124]).

Providing more and better opportunities for adult learning

As pointed out above, many adults in Latin American countries and in OECD countries more broadly do not engage in training. PIAAC data show that many adults who do not participate in training report that there was no training they wished to participate in. Across OECD countries, these so called “disengaged” adults compose one in two 25 to 65-year-olds (OECD, 2021^[117]). This goes up to 63% of adults in Mexico and Ecuador, see Figure 5.3. These adults could be facing difficulties identifying training that is relevant to their needs or may face such high barriers that they perceive training as unachievable for them. Mostly, however, they could be adults who do not see the need for training and are simply not interested in participating. This is the case, for example, for low-qualified adults who are currently employed, receive modest but stable incomes and do not fully grasp the risks and changes that technological change could bring about for their jobs.

Promoting equity and inclusiveness in learning opportunities involves increasing participation in upskilling and retraining among, for example, disadvantaged groups refining the type of training offered so that it fulfils the learning needs and objectives of each individual.

There are many other factors that hinder adults from participating, such as financial and time constraints (related to work or family obligations), insufficient prerequisites for participation and lack of interest in the training on offer. Studies show that participation is often highest among individuals who face low barriers to participation and reap high individual returns. However, the key challenge is to reach those groups that would most benefit the most from accessing high-quality learning opportunities, and whose participation would yield higher social returns. For the group of adults who are disengaged from learning, outreach is essential.

Information on quality of training programmes and providers is essential for individuals and employers to make informed decisions on adult learning (OECD, 2019^[125]). As some training activities do not always lead the desired outcome or may not be perceived as useful by participants, monitoring and evaluation of training programs is essential. Additionally, quality assurance is also seen as a key tool to create trust in the adult training system, especially in non-formal training and especially among adults with low qualifications. The granting of a quality assurance label can also act as a marker of prestige and credibility for providers.

Creating responsive skills systems through employer engagement

In the context of changing skill needs brought about by megatrends such as technological change, demographic shifts and globalisation, high-quality information on skills supply and demand is essential to ensure that learning opportunities are aligned with skill needs. Solid information about skill needs is therefore essential, and countries take different approaches to developing qualitative and quantitative information on skill needs. Quantitative analysis based on official statistics or big data can feed into complex statistical models that assess the balance between skills supply and demand. These are often complemented with qualitative insights, such as employer surveys and foresight scenarios. Stakeholder engagement, notably through social dialogue, is key to ensuring that skills assessment and anticipation exercises provide information in a format and at a level that is consistent with policy objectives and which can inform and motivate policy action.

Engagement of all relevant parties and mechanisms that help reach consensus are instrumental to ensuring that the required policy responses to skills imbalances are put in place. A variety of mechanisms have proven successful in helping to reach consensus, ranging from informal and ad-hoc consultations, to the setting up of independent bodies such as national skills advisory groups, to formal mandates to foster dialogue among stakeholders. Sectoral bodies provide the most favourable opportunities for both employer and trade union involvement in VET and skills policy formulation and implementation.

Strong VET systems, drawing on social partner engagement, yield benefits to employers by increasing the pool of qualified labour, and benefit students by facilitating their transition to skilled employment. The engagement of social partners in the design of VET programmes and policies often happens through employer associations and trade unions which represent the interest of groups of employers and workers. Social partners are involved in VET at different levels. They can sit on bodies advising national and regional governments, collaborate with local VET providers, and provide input into VET programmes corresponding with their sectors. Irrespective of the exact institutional organisation, effective arrangements should allow social partners to provide their input into VET regularly, in a timely manner, and in all relevant areas. (OECD, 2023^[123])

In many OECD countries, schools share the responsibility for delivering VET with companies, i.e. some vocational education and training is provided in schools and some by companies. Employers' provision of training to students, i.e. work-based learning (WBL), represents their largest contribution to VET. WBL refers to learning through participation and/or observation of work under the supervision of an employer. The intensity of WBL differs across VET programmes. In some VET programmes a mandatory WBL component represents an important element of the learning experience. Other VET programmes are more dependent on schools, with work-based learning being an optional and sometimes minor element. In programmes with longer periods of WBL students typically contribute with some productive work, whereas the amount of productive work performed by students in shorter WBL is limited (OECD, 2023^[123]). OECD data show that in Chile only 11% of upper-secondary VET learners are in programmes with a substantial WBL component (OECD, 2023^[71]). In Colombia, all upper-secondary VET programmes have some work-based learning, but it is only optional (OECD, 2023^[71]).

When employers are reluctant or unable to offer WBL places, the government and social partners may want to promote it through a range of incentives. These incentives include financial incentives such as rewarding employers who train with additional funding or by making employers who do not train to pay. Employers' capacity to train can also be supported with measures other than financial ones. Provision of training requires additional efforts from the employer such as filling administrative duties, organising training on the site, appointing and often training employees who are responsible for trainees. Some employers may not feel able to train students as they lack training capacity. Training capacity depends on the quality of trainers, training methods and training equipment. It is typically less well developed in small companies that do not have dedicated training arrangements hindering their capacity to offer training to

students. Small companies may therefore particularly benefit from measures designed to enhance training capacity, such as training for trainers, assistance with administrative work and sharing responsibility for training. When individual VET schools play an active role in reaching out to employers they may need support in developing their links with employers and their capacity to foster WBL. Sometimes this support may come from organised bodies, and it will often also be helpful for schools to find means to share their experiences. (OECD, 2023^[123])

Towards a regional skills strategy for Latin America

A strategic and comprehensive approach to skills policies – formalised in a regional skills strategy – could help build resilient and adaptable skills systems. Such a regional skills strategy can help the Latin America region to build a shared understanding of its skills challenges and identify policy priorities and opportunities for regional cooperation that can help the region to thrive in response to changing economic, social and environmental conditions. This approach is crucial for addressing social inequalities and enhancing social mobility.

A regional skills strategy can make a number of important contributions to Latin America, including:

- **Providing high quality analysis** to identify opportunities, policy priorities and areas with the most potential to improve skills outcomes.
- **Providing regional peer-learning opportunities** to help countries to share their experiences with each other to widen and deepen understanding of policies that work.
- **Identifying international good practices** to support evidence-based policy making.
- **Strengthening stakeholder engagement** to raise awareness among key actors and generate support for action to implement policy reforms.
- **Making recommendations** for improving skills outcomes as well as strengthening regional cooperation with a view to ensuring that skills policies are coherent and mutually reinforcing, and promote equity in education and training opportunities.
- **Raising awareness** to generate support for action to implement policy reforms.

Conclusion

Skills are essential for tackling inequalities and ensuring that no-one is left behind in an increasingly interconnected and rapidly changing world. Skills are key for individuals and particularly vulnerable groups to adapt and succeed in labour markets and societies, and social mobility depends greatly on equipping individuals with the right skills at the right time.

Latin America has made enormous achievements in education and skills in recent decades, in particular through improved enrolment rates in education. However, challenges remain for effective skills development and use. While VET is known to contribute to smooth school-to-work transitions, especially when involving substantial work-based learning, enrolment in upper-secondary VET programmes in Latin American OECD countries remains below the OECD average. Likewise, despite the evident need for individuals to upskill and reskill in times of changing skill needs, participation rates in adult learning are strikingly low in several Latin American countries. Moreover, solid foundational skills are key building blocks for lifelong learning, but a large share of adults in Latin American countries participating in the OECD Survey of Adults Skills are unable to solve problems in a technology-rich environment at a basic level. In fact, many adults lack even the very basics to operate a digital device.

Bridging the skills gap will require identifying changing skills needs for different groups in rapidly changing societies, and creating education and training that are responsive to changing skills needs. In particular, efforts are needed to strengthen VET in Latin American countries in order to make it an attractive choice for different types of learners, including those who are a risk of dropping out of the education system. Likewise, adults should be encouraged and supported to engage in lifelong learning, and this involves removing barriers to participation – especially for disadvantaged groups. Career guidance is key to inform young people and adults about the importance of VET and adult learning and the available possibilities and support mechanisms. Investments in access to training should be coupled with efforts to improve the quality of training and align it with the needs of labour markets and society. Making use of solid evidence about skill needs is therefore crucial when designing training programmes and policies. Social partners should play a key role in this respect, through their involvement in consultation or advisory bodies and through the delivery of work-based learning.

Moving towards a future-ready skills system will require a strategic and comprehensive approach to skills policies. A regional skills strategy for Latin America can help build a shared understanding of the region's skills challenges and identify policy priorities and opportunities for regional cooperation – which will ultimately contribute to resilient and adaptable skills systems in the region.

References

- Aleksynska, M. and A. Kolev (2021), “Education-occupation mismatch in the context of informality and development”, *OECD Development Centre Working Papers*, No. 346, OECD Publishing, Paris, <https://doi.org/10.1787/3291e65c-en>. [134]
- Archer, L. (2015), ““Science capital”: A conceptual, methodological, and empirical argument for extending bourdieusian notions of capital beyond the arts”, *Journal of Research in Science Teaching*, Vol. 52/7, pp. 922-948. [100]
- Arias Ortiz, E. et al. (2024), *El estado de la educación en América Latina y el Caribe 2023*, Banco Interamericano de Desarrollo, <https://doi.org/10.18235/0005515>. [65]
- Arias Ortiz, E. et al. (2024), *The State of Education in Latin America and the Caribbean 2023*, <https://publications.iadb.org/en/state-education-latin-america-and-caribbean-2023>. [12]
- Arnold, J. et al. (2024), “Towards better social protection for more workers in Latin America: Challenges and policy considerations”, *OECD Economics Department Working Papers*, No. 1804, OECD Publishing, Paris, <https://doi.org/10.1787/76a04c6f-en>. [35]
- Bourdieu, P. (1986), *The forms of capital*, pp. 241-258. [85]
- Broecke, S., G. Quintini and M. Vandeweyer (2017), “Explaining international differences in wage inequality: Skills matter”, *Economics of Education Review*, Vol. 60, pp. 112-124, <https://doi.org/10.1016/j.econedurev.2017.08.005>. [128]
- Brown, C., T. Hooley and T. Wond (2020), “Building career capital: developing business leaders’ career mobility”, *Career Development International*, Vol. 25/5, pp. 445-459, <https://doi.org/10.1108/CDI-07-2019-0186>. [86]
- Brunner, J. (2013), “The Rationale for Higher Education Investment in Ibero-America”, *OECD Development Centre Working Papers*, No. 319, OECD Publishing, Paris, <https://doi.org/10.1787/5k40d6717l8x-en>. [76]
- Brunori, P., F. Ferreira and G. Neidhöfer (2023), *Inequality of Opportunity and Intergenerational Persistence in Latin America*, <https://publications.iadb.org/en/inequality-opportunity-and-intergenerational-persistence-latin-america>. [8]
- Busso, M. and J. Messina (2020), *The Inequality Crisis: Latin America and the Caribbean at the Crossroads*, <https://publications.iadb.org/en/the-inequality-crisis-latin-america-and-the-caribbean-at-the-crossroads>. [7]
- CAF (2022), *Inherited inequalities: The role of skills, employment, and wealth*, <https://www.caf.com/media/4660888/red2022-re-eng.pdf>. [9]
- Chetty, R. (2022), “Social capital I: measurement and associations with economic mobility”, *Nature*, Vol. 608, pp. 108-121. [88]
- Covacevich, C. et al. (2021), “Indicators of teenage career readiness: An analysis of longitudinal data from eight countries”, *OECD Education Working Papers*, No. 258, OECD Publishing, Paris, <https://doi.org/10.1787/cec854f8-en>. [90]

- De La Mata, D. (2023), “The role of skills, employment, and wealth in the opportunities of new generations.” [33]
- Diemer, M. (2009), “Pathways to occupational attainment among poor youth of color: The role of sociopolitical development”, *The Counseling Psychologist*, Vol. 39, pp. 6-35. [111]
- ECLAC (2024), *Preventing and reducing school dropout in Latin America and the Caribbean*. [55]
- ECLAC (2023), *Panorama Regional en Educación*, [58]
https://www.cepal.org/sites/default/files/presentations/presentacion_d_trucco_cepal.pdf.
- ECLAC, UNESCO and UNICEF (2022), *Education in Latin America and the Caribbean at a crossroads*. [56]
- ECLAC, UNESCO, UNICEF (2024), “Education in Latin America and the Caribbean at a Crossroads: Regional Monitoring Report SDG4—Education 2030”, *Comparative Education Review*, Vol. 68/2, pp. 312-314, <https://doi.org/10.1086/730227>. [66]
- Encinas-Martín, M. and M. Cherian (2023), *Gender, Education and Skills: The Persistence of Gender Gaps in Education and Skills*, OECD Skills Studies, OECD Publishing, Paris, <https://doi.org/10.1787/34680dd5-en>. [47]
- Ferranti, G. (2004), *Inequality in Latin America and the Caribbean: Breaking with History?*. [142]
- Friedman, S. and L. Laurison (2019), *The Class Ceiling: Why it pays to be privileged*, Policy Press. [84]
- Germán Feierherd, P. (2023), *The Pink Tide and Income Inequality in Latin America*, Cambridge University Press. [3]
- Granovetter, M. (1990), *Getting a job: a study of contacts and careers*, Harvard University Press. [97]
- Hanushek, E. et al. (2015), “Returns to skills around the world: Evidence from PIAAC”, *European Economic Review*, Vol. 73, pp. 103-130, <https://doi.org/10.1016/j.euroecorev.2014.10.006>. [127]
- Herdman, P. (2024), *Innovation in career pathways across five countries*, OECD Publishing. [108]
- Hout, M. and T. DiPrete (2006), “What we have learned: RC28’s contributions to knowledge about social stratification”, *Research in Social Stratification and Mobility*, Vol. 24/1, pp. 1-20, <https://doi.org/10.1016/j.rssm.2005.10.001>. [34]
- IDB (2024), www.iadb.org, <https://www.iadb.org/en/news/complexities-inequality-latin-america-and-caribbean#:~:text=March%2006%2C%202024,for%20developed%20countries%20in%20OECD>. [141]
- IDB (2023), *América Latina y el Caribe en PISA 2022: ¿Cómo le fue a la región?*, <https://publications.iadb.org/publications/spanish/viewer/America-Latina-y-el-Caribe-en-PISA-2022-omo-le-fue-a-la-region.pdf>. [137]
- IDB (2023), *América Latina y el Caribe en PISA 2022: ¿Cuántos tienen bajo desempeño?*, <https://publications.iadb.org/publications/spanish/viewer/America-Latina-y-el-Caribe-en-PISA-2022-cuantos-tienen-bajo-desempeno.pdf>. [138]

- ILO (2023), *2023 Labour Overview*. [48]
- ILO (2014), *Recent experiences of formalization in Latin America and the Caribbean*. [49]
- IMF (2024), *Regional Economic Outlook for the Western Hemisphere*, <https://www.imf.org/en/Publications/REO/WH/Issues/2024/04/19/regional-economic-outlook-western-hemisphere-april-2024#:~:text=The%20Western%20Hemisphere&text=Growth%20is%20now%20moderating%2C%20from,policies%20aimed%20at%20curbing%20inflation.> [28]
- IMF (2024), *Regional Economic Outlook for the Western Hemisphere*. [46]
- Inter-American Development Bank (2024), *The Complexities of Inequality in Latin America and the Caribbean*, <https://www.iadb.org/en/news/complexities-inequality-latin-america-and-caribbean>. [4]
- Jenkins, H. (2017), *Social Mobility and Economic Success*. [52]
- Jones, S., A. Mann and K. Morris (2016), “The ‘Employer Engagement Cycle’ in Secondary Education: analysing the testimonies of young British adults”, *Journal of Education and Work*, Vol. 29/7, pp. 834-856, <https://doi.org/10.1080/13639080.2015.1074665>. [101]
- Kashefpakdel, E. (2016), “Career education that works: an economic analysis using the British Cohort Study”, Vol. 30/3, pp. 217-234. [99]
- Kemple, J. (2008), *Career Academies: long-term impacts on labour market outcomes, educational attainment, and transitions to adulthood*, MDRC. [109]
- Kim, H. (2015), *Resetting Education Policy to Restore Social Mobility*. [51]
- Lafuente, E. (ed.) (2022), *¿Como reconstruir la educación postpandemia? Soluciones para cumplir con la promesa de un mejor futuro para la juventud*, Inter-American Development Bank, <https://doi.org/10.18235/0004241>. [143]
- Lee, Y. et al. (2021), “Equity in career development of high school students in South Korea: The role of school career education.”, *Education Sciences*, Vol. 11/1, p. 20, <https://doi.org/10.3390/educsci11010020>. [104]
- LeGallais, T. (2008), *The work experience placements of secondary school students: widening horizons or reproducing social inequality?*, Birmingham City University, https://www.educationandemployers.org/wp-content/uploads/2014/06/the_work_experience_placements_of_secondary_school_students.pdf. [103]
- Lyche, C. (2010), “Taking on the Completion Challenge: A Literature Review on Policies to Prevent Dropout and Early School Leaving”, *OECD Education Working Papers*, No. 53, OECD Publishing, Paris, <https://doi.org/10.1787/5km4m2t59cmr-en>. [68]
- Mann, A. (2024), *Teenage career development in England: A Review of PISA 2022 Data*. [94]
- Mann, A. (2021), *Career ready?: How schools can better prepare young people for working life in the era of COVID-19*, OECD Publishing, <https://doi.org/10.1787/e1503534-en>. [98]

- Mann, A. (2017), "Schools and the twenty-first century labour market: perspectives on structural change", *British Journal of Guidance and Counselling*, Vol. 45/2, pp. 208-218, <https://doi.org/10.1080/03069885.2016.1266440>. [89]
- Mann, A., C. Percy and E. Kashefpakdel (2018), *Socialised social capital: the capacity of schools to use careers provision to compensate for social capital deficiencies among teenagers*, Routledge, London. [106]
- McMahon, W. (1998), *Education and Growth in East Asia*. [19]
- Mercan, M. (2014), *The Effect of Education Expenditure on Economic Growth: The Case of Turkey*. [17]
- Mulakala, T. (2015), *Social Mobility: Experiences and Lessons from Asia*, KDI. [21]
- Nancy Birdsall, D. (1995), *Inequality and Growth Reconsidered: Lessons from East Asia*. [18]
- Neidhöfer, G., J. Serrano and L. Gasparini (2018), "Educational inequality and intergenerational mobility in Latin America: A new database", *Journal of Development Economics*, Vol. 134, pp. 329-349, <https://doi.org/10.1016/j.jdeveco.2018.05.016>. [43]
- New Brunswick Department of Education and Early Childhood Development (2023), *Career Education Framework in New Brunswick*, <https://www2.gnb.ca/content/dam/gnb/Departments/ed/pdf/K12/FRL/nb-career-education-framework.pdf>. [110]
- OECD (2024), *About PIAAC*, <https://www.oecd.org/en/about/programmes/piaac.html>. [40]
- OECD (2024), *Challenging Social Inequality Through Career Guidance: Insights from International Data and Practice*, OECD Publishing, Paris, <https://doi.org/10.1787/619667e2-en>. [83]
- OECD (2024), *Education at a Glance*, OECD Publishing. [69]
- OECD (2024), *Government at a Glance: Latin America and the Caribbean 2024*, https://www.oecd.org/en/publications/government-at-a-glance-latin-america-and-the-caribbean-2024_4abdba16-en.html. [2]
- OECD (2024), *Government at a Glance: Latin America and the Caribbean 2024*, OECD Publishing, Paris, <https://doi.org/10.1787/4abdba16-en>. [139]
- OECD (2024), *Income inequality indicator*, <https://www.oecd.org/en/data/indicators/income-inequality.html>. [5]
- OECD (2024), *OECD Economic Surveys: Mexico 2024*, OECD Publishing, Paris, <https://doi.org/10.1787/b8d974db-en>. [73]
- OECD (2023), *Review Education Policies - Education GPS*, <https://gpseducation.oecd.org/revieweducationpolicies/#!node=&filter=all>. [16]
- OECD (2023), *Building Future-Ready Vocational Education and Training Systems*, OECD Reviews of Vocational Education and Training, OECD Publishing, Paris, <https://doi.org/10.1787/28551a79-en>. [123]

- OECD (2023), "Career talks with guest speakers: A guide to delivering an effective career development activity", *OECD Education Policy Perspectives*, No. 69, OECD Publishing, Paris, <https://doi.org/10.1787/93594cb3-en>. [96]
- OECD (2023), *Education at a Glance 2023*, https://www.oecd-ilibrary.org/education/education-at-a-glance-2023_e13bef63-en. [14]
- OECD (2023), *Education at a Glance 2023: OECD Indicators*, OECD Publishing, Paris, <https://doi.org/10.1787/e13bef63-en>. [71]
- OECD (2023), *Main Findings from the 2022 OECD Risks that Matter Survey*, OECD Publishing, Paris, <https://doi.org/10.1787/70aea928-en>. [114]
- OECD (2023), *Multi-dimensional Review of El Salvador: Strategic Priorities for Robust, Inclusive and Sustainable Development*, OECD Development Pathways, OECD Publishing, Paris, <https://doi.org/10.1787/2f3d5e1f-en>. [64]
- OECD (2023), *OECD Skills Outlook 2023: Skills for a Resilient Green and Digital Transition*, OECD Publishing, Paris, <https://doi.org/10.1787/27452f29-en>. [115]
- OECD (2023), *PISA 2022 Results (Volume I): The State of Learning and Equity in Education*, <https://doi.org/10.1787/53f23881-en>. [57]
- OECD (2023), *PISA 2022 Results (Volume I): The State of Learning and Equity in Education*, PISA, OECD Publishing, Paris, <https://doi.org/10.1787/53f23881-en>. [116]
- OECD (2023), *PISA 2022: Resultados para América Latina y el Caribe*, https://www.cepal.org/sites/default/files/presentations/presentacion_d_salinas_ocde.pdf. [79]
- OECD (2023), *Skills in Latin America: Insights from the Survey of Adult Skills (PIAAC)*, OECD Skills Studies, OECD Publishing, Paris, <https://doi.org/10.1787/5ab893f0-en>. [30]
- OECD (2022), *Education at a Glance 2022: OECD Indicators*, OECD Publishing, Paris, <https://doi.org/10.1787/3197152b-en>. [72]
- OECD (2022), *Gender Equality in Peru: Towards a Better Sharing of Paid and Unpaid Work*, Gender Equality at Work, OECD Publishing, Paris, <https://doi.org/10.1787/e53901b5-en>. [63]
- OECD (2022), *Pathways to Professions: Understanding higher vocational and professional tertiary education systems*, <https://doi.org/10.1787/a81152f4-en>. [124]
- OECD (2022), *Skills for the Digital Transition: Assessing Recent Trends Using Big Data*, OECD Publishing, Paris, <https://doi.org/10.1787/38c36777-en>. [37]
- OECD (2021), *Education at a Glance 2021*, https://www.oecd-ilibrary.org/education/education-at-a-glance-2021_b35a14e5-en. [13]
- OECD (2021), *Education at a Glance 2021: OECD Indicators*, OECD Publishing, Paris, <https://doi.org/10.1787/b35a14e5-en>. [146]
- OECD (2021), *Experiencing the workplace: the importance and benefits for students*, OECD Publishing, <https://doi.org/10.1787/b679d759-en>. [95]

- OECD (2021), *Future-Ready Adult Learning in Latin America*, https://www.oecd.org/en/publications/future-ready-adult-learning-in-latin-america_18d2f2f1-en.html. [10]
- OECD (2021), *Future-Ready Adult Learning in Latin America. Action Plan*. [44]
- OECD (2021), *How's Life in Latin America? : Measuring Well-being for Policy Making*, https://www.oecd-ilibrary.org/social-issues-migration-health/how-s-life-in-latin-america_2965f4fe-en. [1]
- OECD (2021), *How's Life in Latin America?: Measuring Well-being for Policy Making*, OECD Publishing, Paris, <https://doi.org/10.1787/2965f4fe-en>. [54]
- OECD (2021), *OECD Skills Outlook 2021: Learning for Life*, OECD Publishing, <https://doi.org/10.1787/0ae365b4-en>. [117]
- OECD (2021), *OECD Skills Outlook 2021: Learning for Life*, OECD Publishing, Paris, <https://doi.org/10.1787/0ae365b4-en>. [29]
- OECD (2020), *Dream Jobs? Teenagers' Career Aspirations and the Future of Work*, <https://www.oecd.org/education/dream-jobs-teenagers-career-aspirations-and-the-future-of-work.htm>. [93]
- OECD (2020), *Education at a Glance 2020: OECD Indicators*, OECD Publishing, Paris, <https://doi.org/10.1787/69096873-en>. [122]
- OECD (2020), *OECD Employment Outlook 2020: Worker Security and the COVID-19 Crisis*, OECD Publishing, Paris, <https://doi.org/10.1787/1686c758-en>. [121]
- OECD (2019), *How are PISA results related*. [59]
- OECD (2019), *Getting Skills Right: Future-Ready Adult Learning Systems*, OECD Publishing, Paris, <https://doi.org/10.1787/9789264311756-en>. [125]
- OECD (2019), *PISA 2018 Assessment and Analytical Framework*, PISA, OECD Publishing, Paris, <https://doi.org/10.1787/b25efab8-en>. [77]
- OECD (2019), *PISA 2018 Assessment and Analytical Framework*, <https://doi.org/10.1787/b25efab8-en>. [78]
- OECD (2019), *Skills Matter: Additional Results from the Survey of Adult Skills*, https://www.oecd-ilibrary.org/education/skills-matter_1f029d8f-en. [20]
- OECD (2019), *Skills Matter: Additional Results from the Survey of Adult Skills*, OECD Skills Studies, OECD Publishing, Paris, <https://doi.org/10.1787/1f029d8f-en>. [39]
- OECD (2019), *Survey of Adult Skills (PIAAC)*, <http://www.oecd.org/skills/piaac/publicdataandanalysis/>. [118]
- OECD (2019), *Tackling Vulnerability in the Informal Economy*, https://www.oecd-ilibrary.org/development/tackling-vulnerability-in-the-informal-economy_939b7bcd-en. [15]
- OECD (2018), *A Broken Social Elevator? How to Promote Social Mobility*, OECD Publishing, Paris, <https://doi.org/10.1787/9789264301085-en>. [32]

- OECD (2018), *Equity in Education: Breaking Down Barriers to Social Mobility*, PISA, OECD Publishing, Paris, <https://doi.org/10.1787/9789264073234-en>. [42]
- OECD (2018), *Opportunities for All: A Framework for Policy Action on Inclusive Growth*, OECD Publishing, Paris, <https://doi.org/10.1787/9789264301665-en>. [61]
- OECD (2018), *PISA 2018 Results (Volume I): What Students Know and Can Do*, OECD Publishing, Paris, <https://doi.org/10.1787/19963777>. [147]
- OECD (2017), *OECD Economic Surveys: Argentina 2017: Multi-dimensional Economic Survey*, OECD Publishing, Paris, https://doi.org/10.1787/eco_surveys-arg-2017-en. [67]
- OECD (2017), *To what extent does parents' education influence their children's educational attainment?*, <https://www.oecd-ilibrary.org/docserver/eag-2017-10-en.pdf?expires=1728389065&id=id&accname=guest&checksum=C2C594C3AAF04FEC5984BE4E3002EE60>. [26]
- OECD (2016), *PISA 2015 Results (Volume I): Excellence and Equity in Education*, PISA, OECD Publishing, Paris, <https://doi.org/10.1787/9789264266490-en>. [81]
- OECD (2016), *Skills Matter: Further Results from the Survey of Adult Skills*, OECD Skills Studies, OECD Publishing, Paris, <https://doi.org/10.1787/9789264258051-en>. [41]
- OECD (2015), "Higher education in Latin America: Challenges and opportunities", in *E-Learning in Higher Education in Latin America*, OECD Publishing, Paris, <https://doi.org/10.1787/9789264209992-4-en>. [74]
- OECD (2015), *Survey of Adult Skills (PIAAC)*, <http://www.oecd.org/skills/piaac/publicdataandanalysis/>. [119]
- OECD (2013), *OECD Skills Outlook 2013: First Results from the Survey of Adult Skills*, OECD Publishing, Paris, <https://doi.org/10.1787/9789264204256-en>. [38]
- OECD (2013), *PISA 2012 Results: Excellence through Equity (Volume II)*, https://www.oecd-ilibrary.org/education/pisa-2012-results-excellence-through-equity-volume-ii_9789264201132-en. [27]
- OECD (2012), "Does Money Buy Strong Performance in PISA?", *PISA in Focus*, No. 13, OECD Publishing, Paris, <https://doi.org/10.1787/5k9fhmfzc4xx-en>. [82]
- OECD (2012), *OECD Survey of Adult Skills (PIAAC)*, <http://www.oecd.org/skills/piaac/publicdataandanalysis/>. [120]
- OECD (2010), *Education Policies for Upward Social Mobility in Latin America*, https://www.oecd.org/en/publications/2010/11/education-policies-for-upward-social-mobility-in-latin-america_g17a1f51.html. [126]
- OECD (2010), *Education, Social Mobility and the Middle Sectors*, https://www.oecd-ilibrary.org/development/latin-american-economic-outlook-2011/education-social-mobility-and-the-middle-sectors_leo-2011-9-en. [11]
- OECD (2010), *Latin America Economic Outlook 2011: How Middle Class is Latin America*, <http://dx.doi.org/leo-2011-en>. [144]

- OECD (2010), *Latin American Economic Outlook 2011: How Middle-Class Is Latin America?*, OECD Publishing, Paris, <https://doi.org/10.1787/leo-2011-en>. [75]
- OECD (2010), *The high cost of low education performance*. [60]
- OECD and ILO (2020), *Social Dialogue, Skills and COVID-19*. [133]
- OECD/CAF/ECLAC (2016), *Latin American Economic Outlook 2017: Youth, Skills and Entrepreneurship*, OECD Publishing, Paris, <https://doi.org/10.1787/leo-2017-en>. [145]
- OECD et al. (2023), *Latin American Economic Outlook 2023: Investing in Sustainable Development*, OECD Publishing, Paris, <https://doi.org/10.1787/8c93ff6e-en>. [140]
- OECD et al. (2019), *Latin American Economic Outlook 2019: Development in Transition*, OECD Publishing, Paris, <https://doi.org/10.1787/g2g9ff18-en>. [135]
- OECD et al. (2022), *Latin American Economic Outlook 2022: Towards a Green and Just Transition*, OECD Publishing, Paris, <https://doi.org/10.1787/3d5554fc-en>. [36]
- OECD, E. (2023), *Latin American Economic Outlook 2023. Investing in Sustainable Development*, <https://doi.org/10.1787/20725140>. [136]
- Oxera Consulting LLP (2020), *The impact of social mobility on productivity*, https://www.suttontrust.com/wp-content/uploads/2020/01/Oxera-report_WEB_FINAL.pdf. [131]
- Patrinos, G. (2004), *Returns to Investment in Education: A Further Update*. [23]
- Perry, B. (2016), “Misalignment of Career and Educational Aspirations in Middle School: Differences across Race, Ethnicity, and Socioeconomic Status”, *Social Sciences*, Vol. 5/3, <https://doi.org/10.3390/socsci5030035>. [92]
- Renée, L. (2023), *The Long-Term Effects of Career Guidance in High School: Evidence from a randomised experiment*, https://economie.esq.uqam.ca/wp-content/uploads/sites/54/2023/03/Guidance_LRenee_2023.pdf. [112]
- Resnjanskij, S. (2023), *Mentoring erhöht die Ausbildungsbeteiligung benachteiligter Jugendlicher*, <https://www.ifo.de/DocDL/sd-2023-12-ZDG-berufseinstieg-wachstumsfaktor.pdf>. [107]
- Salvanes, K. and A. Bjorklund (2010), “Education and Family Background: Mechanisms and Policies”, *SSRN Electronic Journal*, <https://doi.org/10.2139/ssrn.1620398>. [45]
- Sehnbruch, K., M. Apablaza and J. Foster (2024), “Poor-Quality Employment: Who Is Deprived in Our Labour Markets?”, *LSE Public Policy Review*, Vol. 3/2, <https://doi.org/10.31389/lsepr.104>. [31]
- Skovhus, R. (2016), “A focus on educational choice has social justice consequences – an empirical study informed by Sen’s capability approach.”, *Journal of the National Institute of Career Education and Counselling*, Vol. 36, pp. 54-60, <https://doi.org/10.20856/jnic>. [105]
- Social Research and Demonstration Corporation (2009), *Future to discover: interim impacts report*, https://srdc.org/wp-content/uploads/2022/07/FTD_IIR_report_ENG.pdf. [113]

- Staff, J. (2010), "Uncertainty in early occupational aspirations: role exploration or aimlessness?", *Social Forces*, Vol. 119, pp. 55-69, <https://doi.org/10.1353/sof.2010.0088>. [91]
- Stanley, J. and A. Mann (2014), *A theoretical framework for understanding employer engagement*, in Mann, A. et al. (eds), *Understanding employer engagement in education*, Routledge, London. [102]
- The Asia Foundation and Korea Development Institute (KDI) (2015), *Social Mobility: Experiences and Lessons from Asia*, The Asia Foundation. [129]
- Tomlinson, M. et al. (2022), "Developing graduate employability for a challenging labour market: the validation of the graduate capital scale", *Journal of Applied Research in Higher Education*, Vol. 14/3, pp. 1193-1209. [87]
- Torche, F. (2014), "Intergenerational Mobility and Inequality: The Latin American Case", *Annual Review of Sociology*, Vol. 40/1, pp. 619-642, <https://doi.org/10.1146/annurev-soc-071811-145521>. [53]
- UNDP (2021), *Trapped? Inequality and Economic Growth in Latin America and the Caribbean*, <https://www.undp.org/latin-america/publications/trapped-inequality-and-economic-growth-latin-america-and-caribbean>. [6]
- UNESCO (2024), *The urgency of educational recovery in Latin America and the Caribbean*. [62]
- UNESCO (2005), *Guidelines for inclusion: ensuring access to education for all*, <https://unesdoc.unesco.org/ark:/48223/pf0000140224>. [25]
- UNICEF (2022), *Two years after: Saving a generation*, <https://www.unicef.org/lac/en/reports/two-years-after-saving-a-generation>. [24]
- Valenzuela, J. (2022), *Trajectory and policies for inclusion in higher education in Latin America and the Caribbean in the context of the pandemic*. [70]
- Willms, J. (2006), "Variation in socioeconomic gradients among cantons in French- and Italian-speaking Switzerland: Findings from the OECD PISA", *Educational Research and Evaluation*, Vol. 12(2), pp. 129-154. [80]
- World Bank (2024), *World Bank Open Data*, <https://data.worldbank.org/> (accessed on June 2024). [130]
- World Bank (2021), *World Development Indicators*, <https://databank.worldbank.org/source/world-development-indicators>. [22]
- World Bank (2020), *World Bank Enterprise Survey*, <https://prosperitydata360.worldbank.org/> (accessed on June 2024). [132]
- World Economic Forum (2020), *The Global Social Mobility Report 2020: Equality, Opportunity and a New Economic Imperative*, World Economic Forum, https://www3.weforum.org/docs/Global_Social_Mobility_Report.pdf. [50]

