

FACTSHEET

Gender, AI, and Digital Skills Ecosystem: Latin America



Argentina

Argentina is a federal constitutional republic and representative democracy. It is divided into 24 administrative divisions called provinces. Located in the southern end of South America, Argentina is the eighth largest country in the world according to total area.

POPULATION (MILLION) EDUCATION EXPENDITURE

46.2 **12.5%***

SECTORAL EMPLOYMENT (%)

Services	Industry	Agriculture	
72.4	20	7.7	Overall
87.8	8.6	3.7	Female
61.3	28.2	10.5	Male

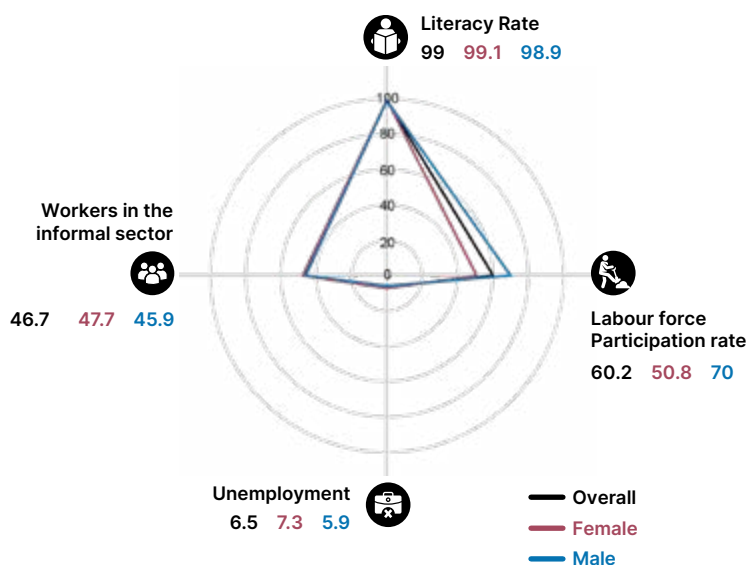
NOTABLE ACTORS

- The National Institute of Technological Education (INET) within the Ministry of Education is responsible for coordinating the implementation of public policies related to TVET at the Secondary Technical, Higher Technical, and Professional Training levels.
- TVET is also part of the Ministry of Labour, Employment and Social Security's goal to provide ongoing skills and productive knowledge for the skilling and reskilling of workers.
- The Ministry for Women, Genders and Diversity was created in 2019 to assist the executive power in all matters related to the design, implementation, and evaluation of national public policies in the areas of gender, equality, and diversity. Within the TVET umbrella, the Commission on Gender Equality within INET was created in 2018 to incorporate a gender perspective into the TVET and increase the enrollment of women and non-binary groups in the TVET. Within the Ministry of Labour, the gender-focus is present at least since the creation of the Tripartite Commission on Equal Opportunities in the Workplace in 2005.

SALIENT POINTS

- A distinctive aspect of Argentina's education policy is the provision of tuition-free higher and university-level education, accessible to all the population through public universities and university institutes. Public higher education represents around 80 percent of total bachelor-level graduates and 65 percent of postgraduates.
- 80 percent of the institutional units in charge of formal TVET are public and are financed through 0.2 percent of total tax income.
- The Tripartite Commission on Equal Opportunities in the Workplace was launched by the Ministry of Labour to connect unions, private actors, and the public sector. It plays a fundamental role in promoting policies for the eradication of gender-based discrimination in the labour market

GENDER-WISE DISAGGREGATION (%)



NOTABLE POLICIES, ACTS, AND SCHEMES

- The National Education Law, 2006 positioned education as a right and common Good established minimum education expenditure by the public sector, and created the Federal Education Council (CEF), responsible for establishing general policies around education and skilling. The current Law for Technical and Professional Education was passed in 2005.
- In the City of Buenos Aires, within the purview of the Ministry of Education, Learning while Programming 5.0 offers training courses on web development, videogames, mobile apps and other topics to students in the last two years of secondary school. This programme has a women quota of 40% of students, which is complemented with activities to encourage participation and retention.

EDUCATION AND SKILLING ECOSYSTEM

- The education system consists of four levels: pre-primary, primary, secondary, and higher education and is compulsory for 14 years, from pre-primary to the secondary level. Since the country maintains a federal structure, each province manages education administration while the Federal Education Council oversees and coordinates national education policies.
- Formal TVET is offered at i) technical schools at the secondary level, where students specialise in a vocational career, carry out apprenticeships, study for one year more than in regular secondary school, and receive a technical degree (ISCED 2 and 3), ii) non-university higher-level technical education, which provides post-secondary degrees related to the world of work (ISCED 5), and iii) vocational training (formación profesional), which are shorter programs that do not require a secondary level degree, coordinated by the provincial Ministries of Education or the Ministry of Labour, and focused on the acquisition and improvement of qualifications and requalifications for the workforce.

* Of total government expenditure

World Bank. "Population, Argentina." The World Bank Group. <https://data.worldbank.org/indicator/SP.POP.TOTL?locations=AR>

Official data from INET, Ministry of Labour, other public organisms

Economic Commission for Latin America and the Caribbean (ECLAC). "Technical and vocational education and training in Latin America and the Caribbean: Socioeconomic impact and financing." 4th International Conference on TVET in the Caribbean, Montego Bay, Jamaica, May 22-24, 2019. https://www.cepal.org/sites/default/files/events/files/tvet_eclac.pdf

World Bank. "Argentina Improves Opportunities for Lifelong Learners." March 18, 2015. <https://www.worldbank.org/en/results/2015/03/18/argentina-improves-opportunities-for-lifelong-learners>

UNESCO. "TVET Country Profile Argentina." <https://unevoc.unesco.org/home/Dynamic+TVET+Country+Profiles/country=AR>

GAN Argentina. "Snapshot of Technical and Vocational Training and Education in Argentina." 2021. https://www.gan-global.org/wp-content/uploads/2021/12/GAN-Argentina_Snapshotof-TVET-in-Argentina.pdf

United Nations Division for the Advancement of Women. "Member States Responses to the Questionnaire on Implementation of the Beijing Platform for Action (1995) and the Outcome of the Twenty-Third Special Session of the General Assembly (2000), Argentina." 2004. <https://www.un.org/womenwatch/daw/Review/responses/ARGENTINA-English.pdf>

OECD. "Women at Work in G20 countries: Progress and Policy Action Paper prepared under Japan's G20 Presidency." 2019. <https://www.oecd.org/g20/summits/osaka/G20-Women-at-Work.pdf>

Martínez Demarco, Solange. "Empowering women through digital skills in Argentina: A tale of two stories." TAUP 28, No. 2 (2019): 23-28. <https://doi.org/10.14512/taup.28.2.s23>

World Bank. "Population 2022." The World Bank Group. https://databankfiles.worldbank.org/public/ddpext_download/POP.pdf

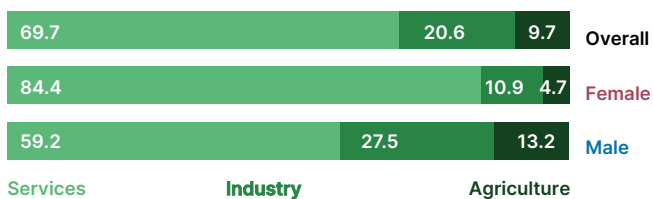
Brazil

Brazil is a democratic federative republic with a presidential system. It comprises of 26 states and one Federal District. Located in the northeast of Latin America, Brazil is the biggest economy in the region.

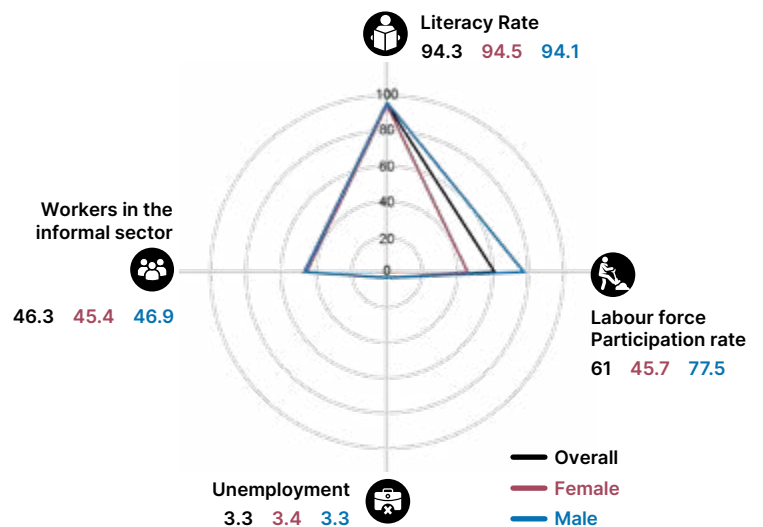
POPULATION (MILLION)
215.3

EDUCATION EXPENDITURE
16.1%*

SECTORAL EMPLOYMENT (%)



GENDER-WISE DISAGGREGATION (%)



NOTABLE ACTORS

- The Secretariat of Professional and Technological Education of the Ministry of Education formulates, implements and evaluates Brazil's professional and technological education policies.
- Some private institutions are part of the Brazilian 'S System', a group of non-profit private organisations authorised by Brazil's government to receive corporate contributions and offer TVET programs. It comprises the Industry's National Learning Service (SENAI), the Commerce's National Learning Service (SENAC), and the Brazilian Micro and Small Enterprises Support Service (SEBRAE), among other bodies.

EDUCATION AND SKILLING ECOSYSTEM

- Compulsory education in Brazil is comprised of five years of primary education and four years of lower secondary education. Technical education is elective at the 3-4 years long upper secondary level.
- There are three levels of formal TVET: i) Initial and Continued level, which can be taken at any point with no specific requirements and is aimed at those with low educational achievement; ii) Technical level, which relates to the upper-secondary level and has three different formats; and iii) the technological level, mostly 3-year trajectories granting tertiary education degrees.

NOTABLE POLICIES, ACTS, AND SCHEMES

- The Bolsa Formação (BF) is the main financing mechanism that provides free training to the vulnerable population previously unable to afford TVET. This is a scholarship whereby the government sponsors vacancies at professional education institutions, encouraging students and workers to attend training.
- The Brazilian government created a Corporate Citizen Program (Programa Empresa Cidadã or PEC) to encourage large private employers to give employees better childcare options as well as extended maternity and paternity leave. Over 18,000 employers registered with PEC and implemented its policies.

SALIENT POINTS

Certification and recognition of prior skills (RPE), both formal and informal, is offered by the National Network of Professional Certification and Initial and Continuing Training (CERTIFIC). This recognition is conditional upon the enrolment of the individual in continuing education which is obtained through the Inter-institutional Programmes of CERTIFIC.

* Of total government expenditure

- World Bank. "Gender Data Portal, Brazil." The World Bank Group. <https://genderdata.worldbank.org/countries/brazil/>
- UNESCO-UNEVOC International Centre for Technical and Vocational Education and Training. "TVET Country Profile: Brazil." November 2018. https://unevoc.unesco.org/wtdb/worldvetdatabase_bra_en.pdf
- Bill and Melinda Gates Foundation "Women's Economic Empowerment: Case Study Brazil." <https://www.gatesfoundation.org/equal-is-greater/case-study/brazil/>
- UN Women. "Sport paves the way for young mothers in Brazil." October 8, 2018. <https://www.unwomen.org/en/news/stories/2018/10/feature-sport-paves-the-way-for-young-mothers-in-brazil>
- OECD. "Education at a Glance 2021: OECD Indicators." OECD Publishing, Paris, 2021. <https://www.oecd-ilibrary.org/sites/d8d547f5-en/index.html?itemId=/content/component/d8d547f5-en>
- International Labour Organization. "Women and men in the informal economy: a statistical picture (third edition)." International Labour Office – Geneva: ILO, 2018. https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/documents/publication/wcms_626831.pdf
- World Bank. "Population 2022." The World Bank Group. https://databankfiles.worldbank.org/public/ddpext_download/POP.pdf

Mexico

Mexico is a federation of 32 states with a representative, democratic, and republican government based on a presidential system.

POPULATION (MILLION)
127.5

EDUCATION EXPENDITURE
16.6%*

SECTORAL EMPLOYMENT (%)

Services	Industry	Agriculture	Overall
62	25.6	12.3	Overall
78.6	17.3	4.1	Female
51.7	30.8	17.4	Male

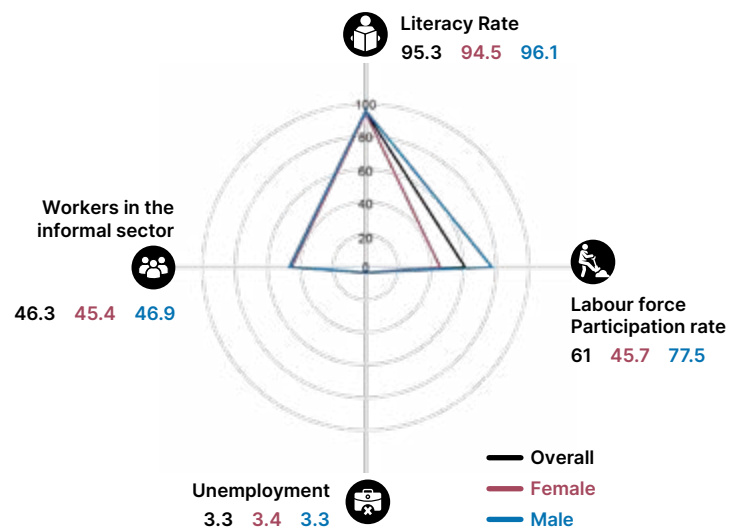
NOTABLE ACTORS

- The Secretariat of Public Education (SEP) and the different bodies that comprise it are in charge of formal education at all levels, including TVET. Given that education is decentralised, SEP coordinates programmes and activities with state-level and municipal bodies, as well as with public and private institutions involved in training.
- There are several decentralised bodies within SEP that have a key role in TVET at different education levels: the Mexican National Council of Technical Professional Education (CONALEP), the National Polytechnic Institute (IPN), the National Centre of Industrial Technical Education (CETI), the National Institute for Adult Education (INEA), the Directorate General of Higher Technological Education (DGEST) –which comprises the National System of Technical Institutes (SNIT)–, the Directorate General of Industrial Technological Education (Dirección General de Educación Tecnológica Industrial (DGETI), and the The General Directorate of Accreditation, Authorisation and Recognition (Dirección General de Acreditación, Incorporación y Revalidación (DGAIR).

EDUCATION AND SKILLING ECOSYSTEM

- Compulsory education in Mexico is 15 years long and includes 3 years of pre-school level, 6 years of primary education, 3 years of lower secondary level, and 3 years of upper secondary education.
- TVET offerings in Mexico are diverse, as they are provided through many modalities and providers. It is offered electively at the last phase of lower secondary education for foundational competences, in the upper secondary level, at the post-secondary non-tertiary level, and in higher education in the form of higher education diplomas or bachelor's degrees.
- Vocational Training is also available outside of formal education in what can be considered informal or non-formal training paths. There are training institutions that respond to public bodies within the Federal Government, states of municipalities. The private sector, NGOs, and international organizations offer courses and programmes. There are institutional pathways to obtain a qualification through programs like CONOCER (see below).

GENDER-WISE DISAGGREGATION (%)



NOTABLE POLICIES, ACTS, AND SCHEMES

- The National Council for Standardization and Certification of Labour Competences (CONOCER) has developed the National System of Competence Standards (NSCS), a framework to acknowledge labour competencies emerging from different modalities and training paths. This enables the recognition and regulation of formal, non-formal and informal learning, allowing for a connection between the world of work and education according to the Education's Mexican Qualifications Framework (MMC). Following completion of certain legally required procedures, programs from different origins can be recognised by the Secretariat of Public Education as equivalent to qualifications in the national system and credited by CONOCER. This is particularly relevant for low-skilled workers lacking formal credentials.
- Mexico has an elective dual vocational education and training model for upper-secondary students. It is a one-to-two-year program that combines education in school with practical training in firms. It allows students to obtain a technological baccalaureate or technical professional degree plus a certification for the professional competencies acquired in the firm. Because in Mexico the vocational schools are often a long way away from the companies providing training, the country has found an innovative solution to deal with vocational school content via the use of a learning software for the theoretical component of dual training is imparted via an e-learning platform.

SALIENT POINTS

In Mexico, 7 percent of education funding is spent on vocational institutions at the secondary level, while 10 percent is spent on general secondary education.

* Of total government expenditure

Central Intelligence Agency. "The World Factbook – Mexico." <https://www.cia.gov/the-world-factbook/countries/mexico/#people-and-society>

World Bank. "Gender Data Portal, Mexico." The World Bank Group. <https://genderdata.worldbank.org/countries/mexico>

Barreto, Hugo; Ermida, Ana Laura. "Aprendizaje y políticas de transición de la educación al trabajo para jóvenes en América Latina y el Caribe." Montevideo: ETD y Oficina de Países de la OIT para el Cono Sur de América Latina; OIT/ Cinterfor, 2015. https://www.oitcinterfor.org/sites/default/files/file_publicacion/panorama_4_completo.pdf

European Centre for the Development of Vocational Training, European Training Foundation, United Nations Educational, Scientific and Cultural Organisation, and UNESCO Institute for Lifelong Learning. "Global inventory of regional and national qualifications frameworks, Volume II: National and regional cases." 2019. https://www.ressources-de-la-formation.fr/doc_num.php?explnum_id=22075

OECD. "Vocational Education and Training in Mexico: Strengths, Challenges and Recommendations." July 2009. <https://web-archiv.oe.cd/2012-06-14/106289-45167044.pdf>

UNESCO and UNESCO Institute for Lifelong Learning. "Mexico Country Profile Education and Training." <https://uil.unesco.org/document/mexico-country-profile-education-and-training>

World Bank. "Population 2022." The World Bank Group. https://databankfiles.worldbank.org/public/dpext_download/POP.pdf

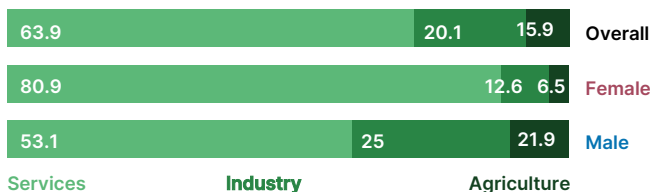
Colombia

The Republic of Colombia is a presidential participatory democratic republic. It comprises 32 departments (Colombian equivalent to states) and one Capital District.

POPULATION (MILLION) EDUCATION EXPENDITURE

51.9 **13.7%***

SECTORAL EMPLOYMENT (%)



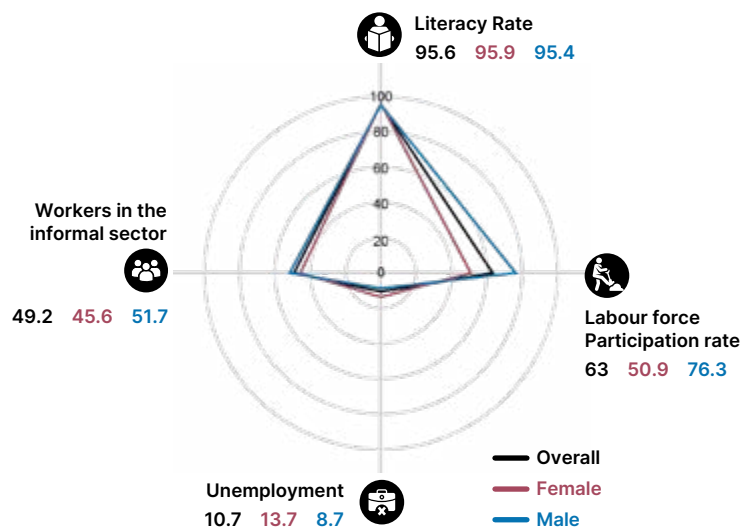
NOTABLE ACTORS

- The National Learning Service (SENA) was created as a result of an initiative of workers, businesspeople, the Catholic Church and the International Labour Organization (ILO) in 1957. It is a national public entity attached to the Ministry of Labour.
- Ministry of Education which, in collaboration with several entities, has launched the National Qualifications Framework (MNC). The MNC aims to address issues such as the disconnect between the education system and the labour market, needs related to lifelong learning systems, and enhancing educational mobility.
- Gender issues in the country used to be within the competence of the Office of the Presidential Adviser on Equality for Women (CPEM), reporting to the Office of the Vice-President, but a Ministry for Equality and Equity was created in December 2022.

NOTABLE POLICIES, ACTS, AND SCHEMES

- SENA and the Ministry of Education run a program that allows secondary school students to graduate with a dual degree: a bachelor's degree and a technician degree by SENIA, which enables them to strengthen their work skills and access opportunities in the labour market.
- The priority of the gender agenda is reflected in the 2018-2022 National Development Plan, "Pact for Colombia, pact for equality", which, for the first time, includes a specific chapter on gender captioned Pact for women's equality. In addition, the Ministry of Labour has implemented the National Workplace Equality Program with a gender approach which develops strategic action lines to promote social and economic recognition of women's work, adopting different mechanisms to enforce the right to equal salary and develop campaigns on the eradication of violence and discrimination of women in the workplace.
- SENA's Specialized Continuous Training Program is designed to equip workers from diverse sectors with relevant knowledge and skills and it has recently refocused on the digital transformation and Industry 4.0. Two gender programs by SENIA stand out: a quota for women in the ICT trainings offered by SENIA in partnership

GENDER-WISE DISAGGREGATION (%)



with Tigo, a private company, and a course for women to acquire digital and teleworking skills offered by SENIA and SheWorks, a digital platform for women. In addition, there are gender-focused programs directed to technical secondary students' digital skills. An example is City of Medellin's "Ser+STEM", which promotes the incorporation of tenth and eleventh-grade female students into ICT fields of study.

EDUCATION AND SKILLING ECOSYSTEM

- Formal education comprises three compulsory levels: (at least) one year of pre-primary education; nine years of primary education divided into two cycles (five years of basic primary education and four years of basic secondary education); and two years of secondary education (academic and/or technical) (ISCED 3). Higher education is also an important part of the formal education system with undergraduate and postgraduate programs organized in technical, scientific, technological, humanitarian, artistic and philosophic fields.
- Within higher formal education, Technical and Vocational Training (ISCED 4 and 5) encompasses programs of at least two years and is aimed at the development of technical competences, skills, and abilities necessary for job performance in a specific activity or field of the production or service sector. In turn, Technological Training (ISCED 5 and 6) provides common basic training for the acquisition of scientific and theoretical knowledge in order to develop innovative and intelligent thinking, with the ability to design and transform production processes.

SALIENT POINTS

SENA plays a crucial role in providing tuition-free training to 80 percent of the students opting for technical and technological programs in the country, either in technical programs, technological programs, or short-term courses known as complementary training courses. The private sector also holds a pivotal role in technical and technological education, with 70% of Higher Education Institutions (HEIs) being privately operated.

* Of total government expenditure

World Bank. "Gender Data Portal, Colombia." The World Bank Group. <https://genderdata.worldbank.org/countries/colombia>

Official Data from Ministry of Education, DANE, SENIA

World Bank. "Gender Data Portal, Literacy Rate." The World Bank Group. <https://genderdata.worldbank.org/indicators/se-adt/>

World Bank. "Population (total)." The World Bank Group. <https://data.worldbank.org/indicator/SP.POP.TOTL>

World Bank. "Population (female)." The World Bank Group. <https://data.worldbank.org/indicator/SP.POP.TOTL.FE.ZS>

International Labour Organization, ILOSTAT. "Data." <https://ilostat.ilo.org/data/>

World Bank. "Government expenditure on education, total (% of government expenditure) - Argentina, Mexico, Brazil, Colombia, Chile." The World Bank Group <https://data.worldbank.org/indicator/SE.XPD.TOTL.GB.ZS?end=2019&locations=AR-MX-BR-CO-CL&start=2015>

World Bank. "Government expenditure on education, total (% of GDP) - Argentina, Mexico, Brazil, Colombia, Chile." The World Bank Group <https://data.worldbank.org/indicator/SE.XPD.TOTL.GD.ZS?end=2019&locations=AR-MX-BR-CO-CL&start=2015>

World Bank. "Population 2022." The World Bank Group https://databankfiles.worldbank.org/public/ddpext_download/POP.pdf

Chile

The Republic of Chile is located in western South America and has unitary and democratic government with a presidential system. The country is divided into 16 regions and 56 provinces.

POPULATION (MILLION)
19.6

EDUCATION EXPENDITURE
21.2%*

SECTORAL EMPLOYMENT (%)

Services	Industry	Agriculture	Overall
70.4	23	6.6	Overall
85.6	10.9	3.5	Female
59.9	31.4	8.7	Male

NOTABLE ACTORS

- The Ministry of Education is responsible for formal TVET education.
- The Ministry of Labour and Social Welfare includes key non-formal TVET entities such as the Technical Training Institution (OTEC) and its National Training and Employment Service (SENCE) program, established in 1976.
- The Chilean TVET system is characterized by a strong presence of the private sector in the provision of technical and vocational education and training, with plenty of for-profit educational institutions supplying courses at the non-university higher education level.
- The Ministries of Finance, and Economy, Development, and Tourism also have programs and trainings more focused on digital skills or entrepreneurship, such as those offered by the Corporation for the Promotion of Production (CORFO).

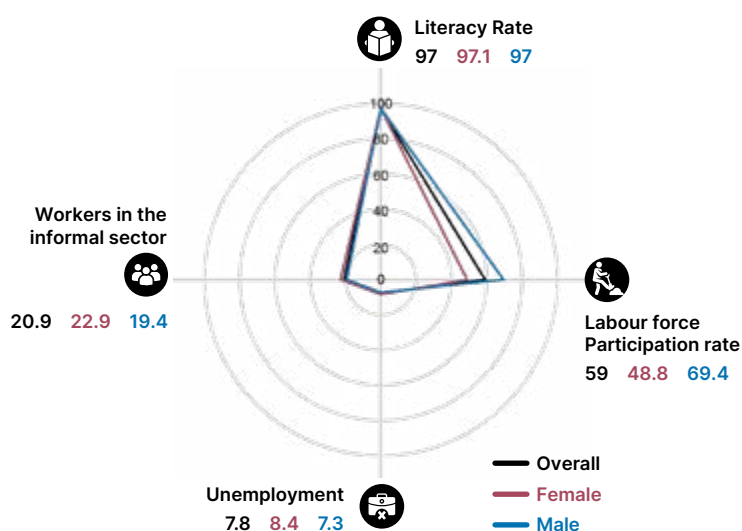
NOTABLE POLICIES, ACTS, AND SCHEMES

- In 2018 Chile launched its National Strategy for TVET with short-, medium-, and long-term actions aiming to ensure the development of talents and abilities of individuals throughout their lives, contributing to equity, social mobility, and decent work. Gender equity is among its transversal dimensions, and actions along the strategy mention the importance of considering principles of gender inclusion and equity.
- The Ministry of Education established the Unit for Inclusion, Citizen Participation, and Gender Equality (UIPE) in 2018. In collaboration with the Ministry for Women and Gender Equality created in 2016, they launched the #EducationwithGenderEquality plan. Its main components are improving quality with equality in the classroom, creating more vocational opportunities, and taking a zero-tolerance stance on gender-based violence. Several TVET initiatives have been introduced under the first two pillars, such as gender equality courses tailored for teachers and administrators and mentorship programs for female students.

* Of total government expenditure

Official data from Ministry of Education, SENCE, SIES
 World Bank. "Population (total)." The World Bank Group. <https://data.worldbank.org/indicator/SP.POP.TOTL>
 World Bank. "Population (female)." The World Bank Group. <https://data.worldbank.org/indicator/SP.POP.TOTL.FE.ZS>
 International Labour Organization, ILOSTAT. "Data." <https://ilostat.ilo.org/data/>
 World Bank. "Government expenditure on education, total (% of government expenditure) - Argentina, Colombia, Chile." The World Bank Group. <https://data.worldbank.org/indicator/SE.XPD.TOTL.GD.ZS?end=2019&locations=AR-MXBR-CO-CL&start=2015>
 World Bank. "Government expenditure on education, total (% of GDP) - Argentina, Colombia, Chile." The World Bank Group. <https://data.worldbank.org/indicator/SE.XPD.TOTL.GD.ZS?end=2019&locations=AR->

GENDER-WISE DISAGGREGATION (%)



- Program Your Opportunity is a digital skills program developed by Claro Chile and UN Women, disseminated through the Labour Information Municipal Offices. The program delivers a tablet to participating women, as well as the possibility of applying for mentorships.

EDUCATION AND SKILLING ECOSYSTEM

- There are 13 years of compulsory education: one year of pre-primary education, six years of primary education and six years of secondary education, although it coexists with an older slightly different structure that will still be in place until 2026.
- Technical and vocational education is provided at the secondary level and at the higher secondary level. At the secondary level, students can choose between a humanistic-scientific education or a technical-vocational education, with the latter representing 25% of overall students. Technical and vocational higher education in Chile comprises two subsystems in charge of the Ministry of Education, the university subsystem (encompassing 60% of higher education students) and the Technical and Vocational non-university subsystem. The latter is composed of Technical Training Centers and Vocational Institutes, both of private nature.

SALIENT POINTS

- An important component of TVET is the standardisation and certification of occupational profiles through the National System of Certification of Labour Competencies and its Vocational Qualifications Framework.
- Private education plays a significant role in Chile. Since technical and vocational higher education is not mandatory, state funding at this level is limited and therefore, private institutions are responsible for the provision of education. Recently, however, 16 public professional institutes have been created along Chile.

MXBR-CO-CL&start=2015
 Ministerio de Educación Estrategia, Gobierno de Chile. "Nacional de la Formación Técnico Profesional." 2020. https://bibliotecadigital.mineduc.cl/bitstream/handle/20.500.12365/14978/EstrategiaF_TP.pdf?sequence=1&isAllowed=y
 Barreto, Hugo; Ermida, Ana Laura. "Aprendizaje y políticas de transición de la educación al trabajo para jóvenes en América Latina y el Caribe." Montevideo: ETD y Oficina de Países de la OIT para el Cono Sur de América Latina; OIT/ Cinterfor, 2015. https://www.oitcinterfor.org/sites/default/files/file_publicacion/panorama_4_completo.pdf
 World Bank. "Gender Data Portal, Chile." The World Bank Group <https://genderdata.worldbank.org/countries/chile>
 World Bank. "Population 2022." The World Bank Group. https://databankfiles.worldbank.org/public/ddpext_download/POP.pdf