# **Mexico**

# **Highlights**

- With 27%, Mexico has the lowest tertiary attainment rate among 25-34 olds in the OECD. The
  country also shows large differences in educational attainment across subnational regions, with
  some regions having particularly low rates of tertiary attainment. In 2020, there was an 18
  percentage-point difference between the region with the highest share of 25-34 year-olds with
  tertiary attainment (Mexico City at 30%) and that with the lowest share (Chiapas at 12%).
- The earnings advantages for workers with tertiary attainment in Mexico are close to the OECD average. Full-time, full-year workers with tertiary attainment earn on average 58% more than workers with upper secondary attainment.
- Mexico is one of the few countries, where employment rates for men with tertiary attainment are lower than for men with upper secondary attainment (86% vs. 88%). In contrast, the employment rates for women with tertiary attainment are 20 percentage points higher than for women with upper secondary attainment (74% vs. 54%).
- In Mexico, only 31% of individuals reported having basic ICT skills (which entails activities such as knowing how to send an email with an attachment), which is less than the OECD average (55%).
   23% of the individuals reported to have standards ICT skills and only 7% reported to have advanced skills.
- The majority of students enrolled at tertiary level in Mexico are bachelor's students (89%) while
  master's students, who are the second largest group of tertiary students, make up just 7% of
  students.
- The average expenditure per student at tertiary level is among the lowest across OECD countries in Mexico. The country spends USD 7 341 annually per student, which is about USD 4 400 more than the spending at primary level and USD 4 500 more than the spending at secondary level. Across OECD countries, the average expenditure at tertiary level is USD 17 559. The share of research and development (R&D) expenditure makes up a smaller fraction of expenditure on tertiary education in Mexico (15%) than on average across OECD countries (33%).
- Between 2015 and 2021, in Mexico, the statutory salaries of teachers at lower secondary level (general programmes) with 15 years of experience and the most prevalent qualifications increased by 3% in real terms reaching USD 44 349, which is less than the OECD average at USD 51 246 (6% increase on the same period).

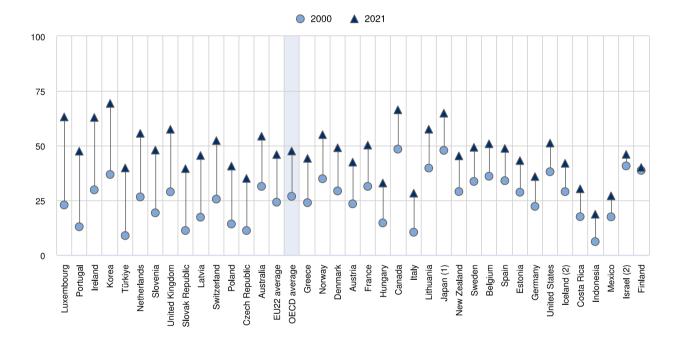
# The output of educational institutions and the impact of learning

Educational attainment has been increasing throughout the OECD, in particular at tertiary level.
 Between 2000 and 2021, the share of 25-34 year-olds with tertiary attainment increased on average by 21 percentage points. In Mexico, the share also increased albeit at a slower pace, by 10 percentage points (from 17% in 2000 to 27% in 2021) (Figure 1). Mexico remains one of the

- two OECD countries, where below upper secondary education is still more common than upper secondary or post-secondary non-tertiary or education as the highest level of attainment among 25-34 year-olds.
- Upper secondary attainment is often seen as a minimum qualification for successful labour market participation. Although the general increase in educational attainment has seen a parallel decline in the share of 25-34 year-olds without upper secondary attainment, 14% of young adults across the OECD still left school without an upper secondary qualification. In Mexico, the share is 44%, which is higher than the OECD average.

Figure 1. Trends in the share of tertiary-educated 25-34 year-olds (2000 and 2021)

In per cent



- 1. Data for tertiary education include upper secondary or post-secondary non-tertiary programmes (less than 5% of adults are in this group).
- 2. Year of reference differs from 2000: 2002 for Israel and 2003 for Iceland.

Countries are ranked in descending order of the difference in the share of tertiary-educated 25-34 year-olds between 2000 and 2021. Source: OECD (2022), Education at a Glance Database, http://stats.oecd.org/. See Source section for more information and Annex 3 for notes (https://www.oecd.org/education/education-at-a-glance/EAG2022\_X3-A.pdf).

Higher educational attainment is often associated with better employment prospects and Mexico is no exception. In 2000, the employment rate among 25-34 year-olds with tertiary education in Mexico was 14 percentage points higher than among those with below upper secondary attainment and 9 percentage points higher than among those with upper secondary or post-secondary nontertiary attainment. On average across OECD countries, the employment rate among 25-34 yearolds with a tertiary qualification was 26 percentage points higher than among those with below upper secondary attainment and 8 percentage points higher than among those with upper secondary or post-secondary non-tertiary attainment. While the positive link between educational attainment and employment rates holds for both men and for women across the OECD, it is particularly strong for women. In Mexico, 44% of women with below upper secondary attainment were employed in 2021, compared to 74% of those with tertiary attainment. In contrast, the figures were 89% and 86% for men.

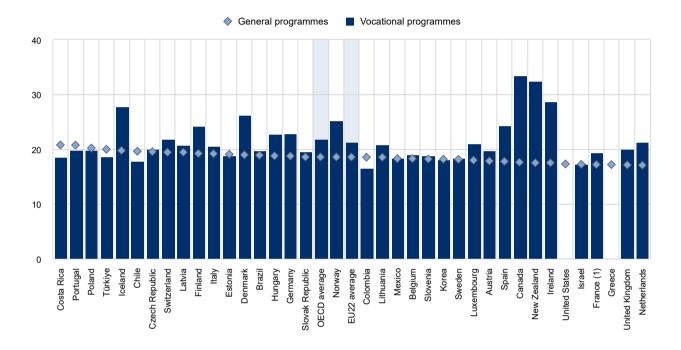
- Across the OECD, the labour market benefits of tertiary attainment have proved especially strong during economic crises. In Mexico, in 2019 the unemployment rates of tertiary-educated adults was higher than adults with below upper secondary or upper secondary or post-secondary non-tertiary attainment. During the COVID-19 pandemic in Mexico, between 2019 and 2020, unemployment for 25-34 year-old workers with below upper secondary attainment increased by 0.9 percentage points, by 1.4 percentage points for workers with upper secondary attainment and by 0.8 percentage points for workers with tertiary attainment. In 2021, unemployment for workers with below upper secondary attainment fell by 0.3 percentage points, by 0.4 percentage points for workers with upper secondary attainment and by 0.6 percentage points for workers with tertiary attainment.
- Educational attainment affects not just labour market prospects, but also wage levels. On average across the OECD, 25-64 year-old workers with upper secondary or post-secondary non-tertiary attainment earn 29% more than workers with below upper secondary attainment, while those with tertiary attainment earn about twice as much. In Mexico, the earnings advantage of tertiary-educated workers was even greater than the OECD average: in 2018, workers with upper secondary attainment earned 34% more than those with below upper secondary attainment and those with tertiary attainment earned more than twice as much.
- National averages provide an incomplete picture of the situation in any given country. In most OECD countries, there are large differences in educational attainment across subnational regions. This is also the case in Mexico. In 2020, the difference between the region with the highest share of 25-64 year-olds with tertiary attainment (Tlaxcala at 32%) and that with the lowest share (Yucatán at 2%) was 30 percentage points. These subnational variations might not only reflect differences in education opportunities but they are also due to economic conditions and internal migration patterns.

# Access to education, participation and progress

- Compulsory education lasts from the age of 3 to the age of 17 in Mexico. The range of ages for which at least 90% of the population are enrolled is shorter than the period of compulsory education and goes from the age of 5 to the age of 13. This differs from most other OECD countries, where more than 90% of the population are enrolled for longer than the period of compulsory education and is also shorter than the OECD average where 90% of the population is enrolled from the age of 4 to the age of 17.
- The age at which children enter early childhood education differs widely across countries. In Mexico, early childhood education starts offering intentional education objectives for children younger than 1 and 5% of children under 3 are enrolled in early childhood education. Across OECD countries, the average enrolment rate among children below the age of 3 is 27%, and the rates range across OECD countries from less than 1% to 63%. The enrolment rate among 3-5 year-olds increases substantially in all OECD countries. In Mexico, 71% of all children of this age are enrolled in early childhood education, which is below the OECD average (83%).
- The average age of graduation from general upper secondary programmes varies from 17 to 21 years across OECD countries and is 18 years in Mexico. Differences in the average age of graduation from vocational upper secondary education are much larger and vary from 16 to 34 years across the OECD. These differences largely depend on whether vocational upper secondary students usually enrol in these programmes towards the end of their compulsory education or in mid-career. In Mexico, the average age of graduation from vocational upper secondary education is 18 years, which is below the OECD average at 22 years (Figure 2).
- In almost all OECD countries, women make up the majority of those graduating from general upper secondary education. In Mexico, the share is 54% (OECD average 55%). In contrast, men are

- overrepresented among graduates of vocational upper secondary programmes in most OECD countries, but not in Mexico where they make up 50% of all vocational upper secondary graduates, below the OECD average (55%).
- In Mexico, 39% of 18-24 year-olds are still in full- or part-time education or training at either upper secondary or tertiary level (significantly below the OECD average of 54%). Of these students, 11% combine their education or training with some form of employment in Mexico, compared to 17% on average across the OECD.

Figure 2. Average age of first-time upper secondary graduates, by programme orientation (2020) In years



1. Average age is based on all graduates instead of first-time graduates.

Countries are ranked in descending order of the average age of first-time upper secondary graduates in general programmes.

Source: OECD//Eurostat/UIS (2022), Tables B3.1 and B3.2. See Source section for more information and Annex 3 for notes (https://www.oecd.org/education/education-at-a-glance/EAG2022\_X3-B.pdf).

- One significant difference across countries' education systems is on whether or not vocational upper secondary programmes provide access to tertiary education. In 12 OECD countries and other participants, all vocational upper secondary graduates have direct access to tertiary education. In Mexico 97% of graduates from vocational upper secondary programme have direct access to tertiary education.
- As is the case in all OECD countries, a majority of students enrolled at tertiary level in Mexico are bachelor's students (89%). However, the next commonest enrolment level varies from country to country. In Mexico, master's students make up the second largest group of tertiary students at 7%. This is also the case in 25 other OECD countries, while in the remaining 14 countries with available data, short-cycle tertiary students form the second largest group.
- At 33%, business, administration and law was the most popular field of study among new entrants into tertiary education, which is the case in most OECD countries. Despite the growing need for digital skills and the good employment prospects of students with degrees in ICT, only a small fraction of entrants into tertiary education choose this field. In Mexico, 83% of 25-64 year-olds with

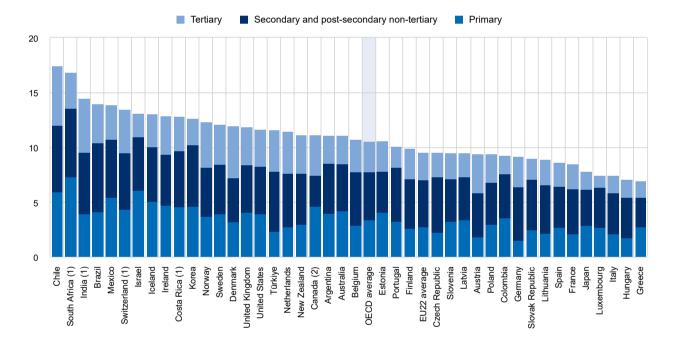
a tertiary ICT qualification are employed, but ICT students make up only 5% of new entrants into tertiary education. This is similar to the OECD average of 6%.

#### Financial resources invested in education

- All OECD countries devote a substantial share of national output to educational institutions. In 2019, OECD countries spent on average 4.9% of their gross domestic product (GDP) on primary to tertiary educational institutions. In Mexico, the corresponding share was 4.6%. Between 2008 and 2019, funding for educational institutions from all sources grew by 18% in Mexico. However, over the same period of time, the increase in GDP was higher with 23%. As a consequence, expenditure on educational institutions as a share of GDP fell by 0.2 percentage points over the same time period.
- Public spending on primary to tertiary education was 13.9% of total government expenditure in Mexico (Figure 3), higher than the OECD average (10.6%). In contrast, relative to GDP, public spending on primary to tertiary education is below the OECD average.

Figure 3. Composition of total public expenditure on education as a percentage of total government expenditure (2019)

Primary to tertiary education (including R&D), in per cent



- 1. Year of reference differs from 2019. Refer to the source table for more details.
- 2. Primary education includes pre-primary programmes.

Countries are ranked in descending order of total public expenditure on education as a percentage of total government expenditure.

**Source:** OECD/UIS/Eurostat (2022), Table C4.1. See *Source* section for more information and Annex 3 for notes (<a href="https://www.oecd.org/education/education-at-a-glance/EAG2022 X3-C.pdf">https://www.oecd.org/education/education-at-a-glance/EAG2022 X3-C.pdf</a>).

• Across OECD countries, the provision of education at primary and secondary levels in terms of curricula, teaching styles and organisational management leads, on average, to similar patterns of expenditure per student from primary to post-secondary non-tertiary levels. OECD countries as a whole spend on average USD 10 722 per student at primary and USD 11 400 per student at secondary level. In Mexico, the values are USD 2 977 at primary and USD 2 890 per student at secondary level, which are among the lowest across OECD countries.

In contrast to lower levels of education, spending on tertiary education varies widely across OECD countries. Expenditure per student at tertiary level in Mexico is higher than at other levels of education, as is the case in almost all other OECD countries. The average expenditure per student in Mexico is USD 7 341 per year, which is about USD 4 400 higher than that of the primary level and USD 4 500 higher than that of the secondary level. It is among the lowest across OECD countries. The average expenditure at tertiary level (USD 17 559) is driven up by high values in a few countries. At 15%, the share of research and development (R&D) expenditure makes up a smaller fraction of expenditure on tertiary education in Mexico than on average across OECD countries (33%).

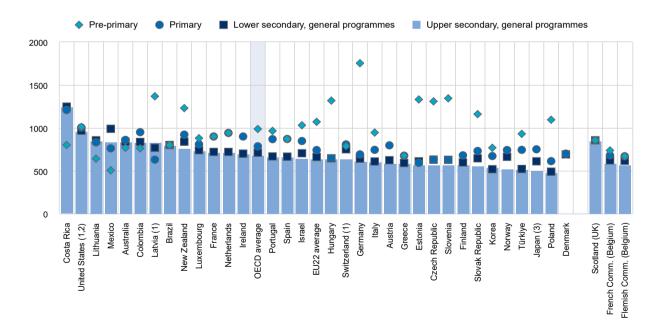
Public funding dominates non-tertiary education (primary, secondary and post-secondary nontertiary) in all OECD countries, even after transfers to the private sector. On average across the OECD, private funding accounts for 10% of expenditure at primary, secondary and post-secondary non-tertiary levels, while this share was 19% in Mexico in 2019. In contrast, private expenditure at tertiary level was higher in all OECD countries. In Mexico, the share of private expenditure at tertiary level reached 44%, which was above the OECD average of 31%.

# Teachers, the learning environment and the organisation of schools

Between 2015 and 2021, on average across OECD countries, the statutory salaries of teachers at lower secondary level (general programmes) with 15 years of experience and the most prevalent qualifications increased by 6% in real terms. In Mexico, salaries increased less than the OECD average, by 3%.

Figure 4. Teaching time of teachers, by level of education (2021)

Net statutory teaching time in hours per year, in public institutions



- 1. Actual teaching time (in Latvia except for pre-primary level).
- 2. Reference year differs from 2021. Refer to the source table for details.
- 3. Average planned teaching time in each school at the beginning of the school year.

Countries and other participants are ranked in descending order of the number of teaching hours per year in general upper secondary education. Source: OECD (2022), Table D4.1. See Source section for more information and Annex 3 for notes (https://www.oecd.org/education/educationat-a-glance/EAG2022 X3-D.pdf).

The average number of teaching hours per year required from a typical teacher in public educational institutions in OECD countries tends to decrease as the level of education increases. Based on official regulations or agreements, annual teaching hours in Mexico are 505 hours per year at pre-primary level, 760 hours at primary level, 988 hours at lower secondary level (general programmes) and 843 hours at upper secondary level (general programmes) (Figure 4).

# Focus on tertiary education

- Among 25-64 year-olds in Mexico, bachelor's degrees are the most common tertiary attainment at 18% followed by master's degrees with 2% and short-cycle tertiary qualifications with 1%. On average across OECD countries, the bachelor's degrees are also the most common (19%), followed by master's degrees (14%) and short cycle tertiary qualifications (7%). As in all OECD countries, only a small fraction of the population holds a doctoral degree: the share is less than 1% in Mexico.
- On average, tertiary attainment generates a wide range of labour-market benefits, including high employment rates. Yet, there are significant differences depending on the field of study. In 2021, employment rates in Mexico were highest among tertiary-educated individuals who studied ICT with 83% and lowest among those who studied natural sciences, mathematics and statistics at 73%. However, these differences need to be put into perspective. Even among 25-64 year-olds with tertiary attainment in the field with the lowest employment rate, this was 3.5 percentage points higher than among those with upper secondary attainment (all fields combined).
- In most OECD countries including in Mexico, tertiary-educated adults have higher rates of
  participation in non-formal education and training than those with a lower level of educational
  attainment. In 2017, 17% of 25-64 year-olds with tertiary attainment in Mexico had participated in
  non-formal education and training in the twelve months prior to being surveyed, compared to 17%
  of their peers with below upper secondary attainment.

Over the decades, independent private institutions have been established to meet increased demand for tertiary education. On average across the OECD, 17% of students are enrolled in independent private institutions. In Mexico, 36% of tertiary students are enrolled in such institutions. Independent private institutions charge higher annual tuition fees on average than public institutions for master's programmes in all OECD countries and other participants with available data, except in Chile and Lithuania.

# **COVID-19: The second year of the pandemic**

- Teacher absences affected the regular operation of schools during the pandemic, whether due to COVID-19 infections or because of precautionary quarantine. However, only approximately half of countries collected information on teacher absenteeism. Mexico collected such data and in contrast to many other countries, teacher absenteeism increased slightly (by between 1% and 5%) between 2019/20 and 2021/22.
- National examinations have also been affected by the pandemic. At general upper secondary level, 18 OECD countries postponed their national examinations during the school year 2019/20, while 10 countries even cancelled them entirely. In 2020/21, national examinations were postponed in 9 countries and cancelled in 6 countries. Mexico rescheduled its national examinations in 2019/20 and in 2020/21.
- Most countries conducted assessments of the impact of school closures on learning outcomes at various levels of education and along several dimensions. Mexico has conducted studies to evaluate the effects of the pandemic on the impact on primary, upper secondary general and

- vocational education. The assessments covered mathematics and reading and science. Like many other countries, Mexico also evaluated dimensions such as the well-being of students or the effectiveness of distance-learning strategies.
- In school year 2022, national programmes to support students affected by the pandemic were implemented in Mexico at pre-primary, primary, lower secondary, upper secondary general and vocational and tertiary level. At primary to upper secondary education, measures to address the effects of the COVID-19 pandemic included: accelerated education or catch-up programmes for students who dropped out of school, community mobilisation campaigns to bring students back to school, adjustments to subject curricula, early warning systems to identify students at risk of dropping out, referral systems for students in need of specialised services, psychosocial and mental health support to students, individualised self-learning programmes, increased instruction time through summer schools, extended school days or the school week or academic year, tutoring programmes or financial support for tutoring and additional water, sanitation and hygiene services. The government has already assessed the effectiveness of these programmes.
- The increased digitalisation of education has been a major consequence of the COVID-19 pandemic in many OECD countries. At lower secondary level, Mexico has responded to the pandemic with an enhanced provision of distance learning and digital training to students.
- The challenges related to the COVID-19 pandemic have created additional costs for education systems. Preliminary budget estimates for 2021 suggest that, compared to 2020, the education budget at pre-primary level in Mexico declined slightly (by between 1% and 5%, in nominal terms) at primary to tertiary level.
- The COVID-19 pandemic had a significant impact on adult learning in most OECD countries. In 2020, the share of adults who participated in a formal or non-formal education and training activity in the four weeks prior to being surveyed decreased by 2 percentage points on average across OECD countries compared with 2019. However, in 2021, participation in non-formal education and training returned to pre-pandemic levels in most countries. From 2019 to 2020, the share of adults participating in a formal or non-formal education training activity. From 2020 to 2021, it and has thus increased above pre-pandemic levels.
- Young adults who are neither employed nor in formal education or training (NEET) for prolonged periods are at risk of adverse economic and social outcomes in both the short and the long term. After increasing during the COVID-19 pandemic in 2020, the share of 18-24 year-olds who are NEET in Mexico declined in 2021. The share of NEET among young adults was 22% in 2021, at pre-COVID levels.

#### References

OECD (2022), Education at a Glance 2022: OECD Indicators, OECD Publishing, Paris, https://dx.doi.org/10.1787/69096873-en.

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#### More information

For more information on Education at a Glance 2022 and to access the full set of Indicators, see: <a href="https://doi.org/10.1787/3197152b-en">https://doi.org/10.1787/3197152b-en</a>

For more information on the methodology used during the data collection for each indicator, the references to the sources and the specific notes for each country, see Annex 3 (https://www.oecd.org/education/education-at-a-glance/EAG2022 X3.pdf).

For general information on the methodology, please refer to the *OECD Handbook for Internationally Comparative Education Statistics: Concepts, Standards, Definitions and Classifications* (https://doi.org/10.1787/9789264304444-en).

Updated data can be found on line at <a href="http://dx.doi.org/10.1787/eag-data-en">http://dx.doi.org/10.1787/eag-data-en</a> and by following the StatLinks and charts in the publication.

Data on subnational regions for selected indicators are available in the *OECD Regional Statistics* (database) (OECD, 2022). When interpreting the results on subnational entities, readers should take into account that the population size of subnational entities can vary widely within countries. For example, regional variation in enrolment may be influenced by students attending school in a different region from their area of residence, particularly at higher levels of education. Also, regional disparities tend to be higher when more subnational entities are used in the analysis.

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The data on educational responses during COVID-19 were collected and processed by the OECD based on the Joint Survey on National Responses to COVID-19 School Closures, a collaborative effort conducted by the United Nations Educational, Scientific and Cultural Organization (UNESCO); the UNESCO Institute for Statistics (UIS); the United Nations Children's Fund (UNICEF); the World Bank; and the OECD.

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