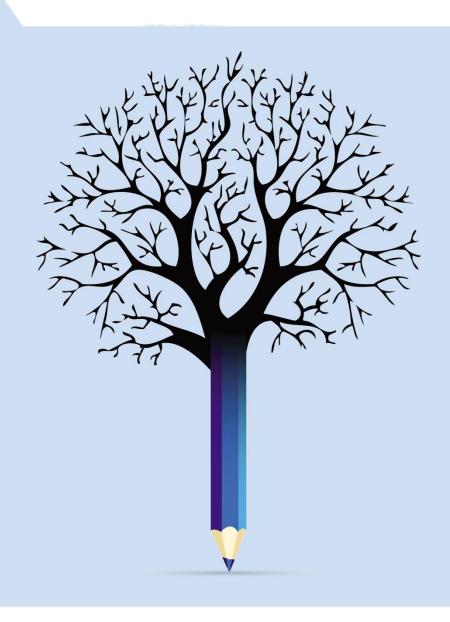


# EDUCATION POLICY OUTLOOK MEXICO





#### **EDUCATION POLICY OUTLOOK**

This updated policy profile on education in Mexico is part of the *Education Policy Outlook* series, which presents comparative analysis of education policies and reforms across OECD countries. Building on the OECD's substantial comparative and sectorial policy knowledge base, the series offers a comparative outlook on education policy. This country profile is an update of the <u>first policy profile of Mexico</u> (2013) and provides: analysis of individual countries' educational context, strengths, challenges and policies; analysis of international trends; and insight into policies and reforms on selected topics. It is an opportunity to take stock of progress and where the education system stands today from the perspective of the OECD through synthetic, evidence-based and comparable analysis.

Designed **for policy makers, analysts and practitioners** who seek information and analysis of education policy, and taking into account the importance of national context, the country policy profiles offer constructive analysis of education policy in a comparative format. Each profile reviews the current context and situation of a country's education system and examines its challenges and policy responses according to six policy levers that support improvement:

- Students: How to raise outcomes for all in terms of 1) equity and quality and 2) preparing students for the future.
- Institutions: How to raise quality through 3) institutional improvement and 4) evaluation and assessment.
- System: How the system is organised to deliver education policy in terms of 5) governance and 6) funding.

Some country policy profiles contain spotlight boxes that draw attention to selected policy issues that are promising or showing positive results, and may be relevant for other countries.

**Special thanks** to the Government of Mexico for its active input during consultations and constructive feedback on this report.

**Authors**: This country policy profile was prepared by Manuela Fitzpatrick, Diana Toledo Figueroa, Gillian Golden, and Shiana Crosby in the Policy Advice and Implementation Division, led by Paulo Santiago. Editorial support was provided by Liz Zachary and administrative support was provided by Jonathan Wright. This profile builds on the knowledge and expertise of many project teams across the OECD's Directorate for Education and Skills, to whom we are grateful.

**Sources**: This country profile draws on OECD indicators from the Programme for International Student Assessment (PISA), the Survey of Adult Skills of the Programme for International Assessment of Adult Competencies (PIAAC), the Teaching and Learning International Survey (TALIS) and the annual publication *Education at a Glance*, and refers to country and thematic studies, such as OECD work on early childhood education and care, teachers, school leadership, evaluation and assessment for improving school outcomes, equity and quality in education, governing complex education systems, vocational education and training, and tertiary education. Much of this information and documentation can be accessed through the OECD Education GPS (<a href="http://gpseducation.oecd.org">http://gpseducation.oecd.org</a>). This profile also benefitted from responses from the Government of Mexico to the OECD Education Policy Outlook National Survey for Comparative Policy Analysis (update for 2016/17).

Most of the figures quoted in the different sections refer to Annex B, which presents a table of the main indicators for the sources used throughout the country profile. Hyperlinks to the reference publications are included throughout the text for ease of reading, and also in the References and further reading section, which lists both OECD and non-OECD sources.

The Education Policy Outlook series also includes a recurring publication. The first volume, Education Policy Outlook 2015: Making Reforms Happen, was released in January 2015. The second volume, Education Policy Outlook 2018: Putting Students' Learning at the Centre will be released in June 2018.

More information is available from the OECD Directorate for Education and Skills ( $\underline{www.oecd.org/edu}$ ) and its web pages on the Education Policy Outlook ( $\underline{www.oecd.org/edu/policyoutlook.htm}$ ).



#### **TABLE OF CONTENTS**

Highlights	4
Equity and quality A need to improve access to quality education for all students	8
Preparing students for the future  Encouraging completion of upper secondary education and improving tertiary education	. 10
School improvement Supporting teachers and school leaders to raise learning outcomes in a complex education system	.12
Evaluation and assessment to improve student outcomes Aiming for greater system transparency	. 15
Governance A federal system where better exchanges at the sub-national level are key to improving quality	. 17
Funding Addressing under-investment at all levels	. 20
Annex A: Structure of Mexico's education system	. 22
Annex B: Statistics	. 23
References and further reading	. 26
Figures	
Figure 1. Trends and comparative performance of 15-year-olds in science, PISA	5 9 11 13
Spotlights	
Spotlight 1. Key policies, key challenges and previous OECD recommendations in Mexico	.14



#### **HIGHLIGHTS**

#### Mexico's educational context

Students: Mexico's performance was lower compared to other OECD countries in PISA 2015. Mathematics performance improved between 2003 and 2015, while performance in science and reading remained mostly unchanged. In terms of coverage, Mexico has made significant progress in expanding access to early childhood education and care (ECEC) in recent years. At the same time, the large increase in the demand for low-skilled labour generated by the boost in manufacturing activities and informal employment has decreased the opportunity cost of leaving education, contributing to low graduation rates from secondary education. Mexico made upper secondary education compulsory in 2012, in order to attain universal coverage by 2022, and enrolment rates have increased. Recent education reforms have also aimed to boost technical education by encouraging young people to pursue careers and research in science, technology, engineering, and mathematics (STEM) fields. Although the system remains complex in its offer, tertiary education coverage has progressed significantly in recent years.

Institutions: Mexico's education system has over 36 million students, 2 million teachers and 260 000 institutions from primary to tertiary education. In TALIS 2013, a higher share of teachers in Mexico than in other participating countries reported working in schools where 30% or more of the students were from a socio-economically disadvantaged background. Almost a quarter of teachers in Mexico also reported not feeling prepared to perform their work, and most reported not having access to induction or mentoring processes, although a large share reported participating in continuous education activities. Teachers in Mexico had slightly longer net teaching hours than the OECD average and catered to a larger number of students in 2015, although salaries have improved in recent years and are competitive within the national context. The Secretariat of Public Education (Secretaría de Educación Pública, SEP) and the National Institute for Education Evaluation (Instituto Nacional para la Evaluación de la Educación, INEE) are responsible at the federal level for the development and co-ordination of evaluation in the education system, including the National System for Educational Evaluation.

**System:** SEP leads the national education system in Mexico, which must cater to the education needs of a large and highly diverse population. Since 1992, Mexico has a decentralised education system in which 31 states have autonomy over their education systems and the operation of basic education services (pre-primary, primary, secondary and initial teacher education) within their territories, while SEP has the capacity of establishing norms and regulations, and operates Mexico City's basic education system. However, annual expenditure per student by educational institutions (in equivalent USD converted using PPP<sup>1</sup> for GDP<sup>2</sup>) at the primary level in 2014 was among the lowest in the OECD, while tertiary education expenditure per student was over three times the expenditure in primary educational institutions - the highest differential across all countries with available data. Funding for schools comes from federal, state level, and private sources.

#### **Key policy issues**

Mexico has the key challenge of improving coverage and quality for all students across socio-economic backgrounds. As part of these efforts, improving the quality and coverage of ECEC needs to remain a priority so that all children can have a strong start in education. Mexico has made considerable efforts to strengthen the teaching profession and these need to be continued. For instance, policies that aim to cover the overall career pathways of teachers are adapted as they are implemented. In the same way, while evaluation mechanisms have been evolving, aiming to provide greater consistency and transparency, the country still faces the challenge of effectively monitoring education improvement in a system that has a large variety of cultural and socio-economic contexts and with limited types of student assessment tools available. Another challenge is developing a better understanding across the system of evaluation as an improvement process, and to ensure that actors in particular at the school level have the skills, competencies and tools with which to drive improvement. Reform processes in Mexico also need to continuously ensure appropriate capacity and clarity among national and local stakeholders in the distribution of responsibilities across the decentralised education system, and a stronger dialogue with the states, other secretariats (ministries) and agencies. Furthermore, for Mexico to effectively put the school at the centre of its education system, it needs to provide sufficient resources to make this possible. This involves reflecting on how these can be allocated more efficiently and equitably across schools.

#### Selected recent policy responses

In 2012, access to quality education became a right for all Mexicans. As part of subsequent efforts, Mexico promoted a New Educational Model (*Nuevo Modelo Educativo*, 2017), scheduled to take effect in 2018.

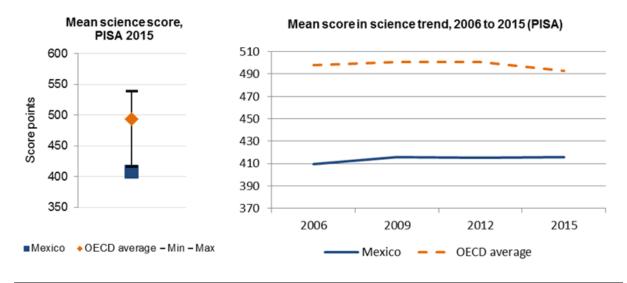
The National System of the Professional Teaching Service (*Servicio Profesional Docente*, 2013) aims to bring together policy components relative to the teaching profession in a coherent way for primary, lower and upper secondary education. It sets out the basis for selection, promotion, incentives and tenure possibilities for teachers. Teacher appraisal and teacher education are seen as transversal processes during teaching career pathways.

The Law of the National Institute for Education Evaluation (2013) created a system of national evaluation (Sistema Nacional de Evaluación Educativa, SNEE) in Mexico.



Mexico's performance in science has remained unchanged since 2006, when it was the main domain assessed in PISA. However, performance among low-performing students improved by 7 score points every three years, on average, between 2006 and 2015. The impact of socio-economic status on learning outcomes is lower (10.9% of variance in performance) than the OECD average (12.9%) (Figure 1).

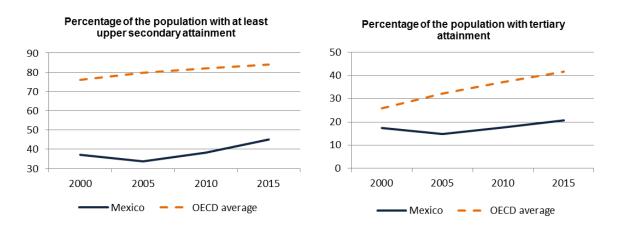
Figure 1. Trends and comparative performance of 15-year-olds in science, PISA



Note: "Min"/"Max" refer to OECD countries with the lowest/highest values. Sources: OECD (2016), PISA 2015 Results (Volume I): Excellence and Equity in Education, PISA, OECD Publishing, Paris. <a href="http://dx.doi.org/10.1787/9789264266490-en">http://dx.doi.org/10.1787/9789264266490-en</a>; OECD (2013), First Results from the Survey of Adult Skills, OECD Publishing, Paris, <a href="http://dx.doi.org/10.1787/9789264204256-en">http://dx.doi.org/10.1787/9789264204266-en</a>.

Secondary and tertiary attainments in Mexico are lower than the OECD average (Figure 2). Less than half of 25-34 year-olds had attained at least upper secondary education (46.7%) in 2016, compared to the OECD average of 84.6%; and less than a quarter (21.8% in 2016) had attained tertiary education compared to the OECD average of 43.1%. At the same time, Mexico had a significant increase in first-time graduation rates in secondary education from 40% in 2000 to 56% in 2015 (OECD average: 86%).

Figure 2. Evolution of secondary and tertiary attainment of the adult population, 2000 to 2015



Source: OECD (2017), Education at a Glance 2017: OECD Indicators, OECD Publishing, Paris, <a href="http://dx.doi.org/10.1787/eag-2017-en">http://dx.doi.org/10.1787/eag-2017-en</a>.



#### Spotlight 1. Key policies, key challenges and previous OECD recommendations in Mexico

## Main education policies from Mexico included in this country profile

Key challenges identified and recommendations previously provided by the OECD to Mexico

#### **STUDENTS**

- Constitutional Reform (2012)
- New Educational Model (Nuevo Modelo Educativo) (2017)
- Programme for Inclusion and Educational Equity (Programa para la Inclusión y la Equidad Educativa) (2014)
- PROSPERA (previously known as Oportunidades) (1997)
- Dual training system (Modelo Mexicano de Formación Dual, 2013)
- Compulsory upper secondary education (Educación Media Superior Obligatoria, 2012)
- Movement against School Dropout (Movimiento Contra el Abandono Escolar) (2013/14)
- Constructing Yourself (Construye T, 2008)
- National Scholarship Programme (Programa Nacional de Becas, 2014)

Key challenges identified [2000, 2007, 2010, 2015, 2017]\*: Mexico had low performance in PISA across cycles and low rates of upper secondary school completion (69% in 2015, compared to an OECD average of 84%). Improving the quality of education for all students across socio-economic backgrounds and improving equity in quality learning opportunities were identified as a need for Mexico, particularly for students from indigenous and disadvantaged backgrounds. The OECD has also considered that education needs to be made more relevant to students' interests and future development needs.

of previous Summary related recommendations: The OECD recommended setting up a framework to take care of low achievers instead of relying on policies such as grade repetition to repair learning gaps, as well as enhancing the quality of indigenous bilingual education and lower secondary learning via television in remote areas (telesecundarias). It also recommended strengthening technical education, for example by developing an apprenticeship system, or providing better information available training programmes (through including promotional campaigns, television), while strengthening collaboration with entrepreneurs and associations.

#### **INSTITUTIONS**

- Amendments to the General Law of Education (Ley General de Educación, 2013)
- National Certificates of Education Infrastructure for Schools (Escuelas al CIEN, 2015)
- Full-Day schooling (2016)
- National System of the Professional Teaching Service (Ley General del Servicio Profesional Docente), 2013)
- National Strategy for Continuous Training of Teachers (Estrategia Nacional para la Formación Continua Docente, 2016)
- Law of the National Institute for Education Evaluation (INEE, Instituto Nacional para la Evaluación de la Educación, 2013)
- Education Performance Appraisal (Evaluación del Desempeño) for teachers in primary, lower secondary and upper secondary education (2015)
- National Plan for Learning Assessment (Plan Nacional para la Evaluación de los Aprendizajes,

Key challenges identified [2010, 2012]\*: The OECD has identified that it is a priority for Mexico to strengthen its teaching profession by making it more attractive and strengthening professional pathways overall. Although some teachers' colleges (*Escuelas Normales*) and other initial teacher preparation institutions provided sound initial preparation for teacher candidates, there were large variations. Quality in compulsory education and lifelong learning is another challenge.

previous Summary related recommendations: The OECD recommended that Mexico engage in a clear plan to improve teaching quality by making the profession more attractive to good candidates, raising the bar for entry into the especially teachers' profession, at colleges (Normales), and establishing a probationary period for newly qualified teachers with intensive mentoring and support. The OECD also recommended defining clear, coherent teacher standards to signal to the profession and to society at large the core knowledge, skills and values that should be associated with effective teaching, and to develop and implement a



## **MEXICO**

#### PLANEA, 2015)

standards-based teacher evaluation system focused on improving teaching. The OECD considered it key to provide quality continuous education and incentives. Establishing a coherent evaluation and assessment system covering student achievement, school evaluation and system evaluation was also identified as key.

#### **SYSTEM**

- Educational Reform of Mexico (Reforma Educativa en México, 2013)
- New Educational Model for compulsory education: Educating for freedom and creativity (Modelo Educativo para la Educación Obligatoria: Educar para la Libertad y la Creatividad, 2017)
- Education regions (Regiones Educativas, 2015)
- The School at the Centre Programme (Programa La Escuela al Centro, 2016)
- Roadmap for the Implementation of the Educational Model (Ruta para la implementación del Modelo Educativo, 2017)
- Fund for Education and Payroll Operating Expenses (National Fund of Allocations for the Teachers' Payroll and Operative Expenditure, FONE, Fondo de Aportaciones para la Nómina Educativa y Gasto Operativo, 2015)
- Single teacher salary negotiation (2014)

Key challenges identified [2005, 2015, 2017]\*: In 2017, Mexico's public spending on education as a share of GDP was around the OECD average, but spending per student was very low compared to the OECD average. Most education spending in Mexico went to teachers' salaries, and not enough to infrastructure or investment. In 2015, Mexico spent three times as much on tertiary students than on primary and secondary and post-secondary non-tertiary students.

Summary of previous related OECD recommendations: The OECD recommended that Mexico review mechanisms of financial and human resource allocation to make it more in line with needs and to give more priority to fund pre-primary, primary, lower and upper secondary education.

#### \* NOTES

- 1: The information on key challenges and recommendations in this spotlight draws from a desk-based compilation from previous OECD publications (subject to country participation). The spotlight is intended for exploratory purposes to promote policy dialogue, and should not be considered an evaluation of the country's progress on these recommendations. Causality should not be inferred either: while some actions taken by a country could correspond to previous OECD recommendations, the OECD acknowledges the value of internal and other external dynamics to promote change in education systems.
- 2: Main sources: Economic Survey of Mexico [OECD, 2002; 2005; 2007; 2015, 2017] / Improving Schools Review [OECD, 2010] / Review of Evaluation and Assessment in Education [OECD, 2012].



## EQUITY AND QUALITY: A NEED TO IMPROVE ACCESS TO QUALITY EDUCATION FOR ALL STUDENTS

Mexico's performance in science was low compared to other OECD countries (416 score points compared to the OECD average of 493 score points) in PISA 2015. Mathematics performance has improved 5 score points every three years, on average, between 2003 and 2015. Performance in science remained mostly unchanged across PISA cycles, with an average score improvement of 1.7 score points, while performance in reading has remained the same. Mexico's share of students performing below Level 2 has decreased by 7 score points on average every three years, between 2006 and 2015. However, in PISA 2015 it was 48%, the highest among OECD countries (just over 20% of students at OECD average). Socio-economic status had lower than average impact on science performance in PISA 2015, explaining 10.9% of the variance in performance (OECD average: 12.9%). This is partly because in Mexico, the most advantaged students perform below their peers with comparable socio-economic background across OECD countries (with an average of 446 score points for the most advantaged Mexican students, compared to 540 score points for their peers in other OECD countries on average).

ECEC policies can improve students' opportunities to succeed in education later on. Mexico has made significant progress in expanding access to ECEC in recent years, but sustained efforts are needed to improve coverage and quality. Pre-primary education (*educación preescolar*) begins at age 3 and lasts between 2 and 3 years. Both education-only and integrated education and care pre-primary programmes exist nationally. Separate formal curricula (established in 2011) are in place for early childhood education and care and pre-primary education, although some child centres have provided the first year of formal pre-school education, delivered by qualified teachers, since 2002. Although the enrolment of 3-year-olds in ECEC has nearly doubled since 2005, only one in two 3-year-olds (45.8%) was enrolled in 2015, lower than the OECD average of 77.8%. By age 4, nearly 90% of children were enrolled in pre-primary education in 2014, above the OECD average of 85%. At the same time, the participation of children in ECEC varies widely among regions. According to national data, in 2016/17 net coverage for children aged 3 to 5 years old ranged from 92.8% in Tabasco to 58.2% in Quintana Roo. Mexico has also faced a significant challenge of improving the quality of ECEC. After accounting for socio-economic differences, 15-year-old students who had benefitted with at least 2 years of pre-primary education during their childhood scored no higher than their peers who did not receive pre-primary education.

According to OECD evidence, certain system level policies and practices in Mexico that can favour equity, such as delayed streaming and limited ability grouping, but others can hinder it, such as grade repetition. Compulsory education in Mexico begins at age 3 and ends at age 17, longer than the typical duration across the OECD, and students are first formally streamed into different educational pathways at the age of 15, which is later than the OECD average of 14. School choice levels are higher than the OECD average, according to parents' reports in PISA 2015 (41.7% of parents reported that there was a choice of more than one school in their area, compared to an OECD average of 36.8%). Nevertheless, grade repetition can lead to increased student disengagement and early school leaving. Grade repetition in Mexico is higher than the OECD average: 15.8% of 15-year-olds reported in PISA 2015 that they had repeated a grade, compared to the OECD average of 11.3%.

In the Mexican education system, students are comparatively more likely to attend a school in which they interact with other students whose socio-economic background is similar to their own. Mexico has the lowest level of social inclusion (60.3) across all OECD countries (OECD average: 76.5), and PISA results show that Mexico's variation in students' results is largely due to between-school differences in performance. PISA results also show that students in public schools score 16 points higher than students in private schools after accounting for socio-economic status.

Despite improvements, large performance gaps remained for students in Mexico who speak a different language at home to the language of assessment in PISA 2015 (64 score points). A national <u>study</u> found that only 9.8% of indigenous monolingual students between the ages of 15 and 17 continue to be enrolled at school, and this is often at lower levels of education than what they should be studying. Children from migrant families working in the fields (*jornaleros agrícolas migrantes*) also face particularly challenging circumstances to access an quality education, and often have to work from an early age.

Key strengths	Key challenges
<ul> <li>Positive system-level policies prevail (e.g. longer compulsory education, delayed tracking, limited ability grouping).</li> </ul>	<ul> <li>Raising performance of all students, especially those from disadvantaged backgrounds, and making the education system more inclusive.</li> </ul>
<ul> <li>Expanding access to ECEC from age 3.</li> </ul>	Improving further coverage and quality of ECEC.



A constitutional reform in Mexico in 2012 made quality education a right for all Mexicans. As part of efforts undertaken, Mexico promoted a New Educational Model (*Nuevo Modelo Educativo*, 2017), scheduled to take effect during 2018/19. It puts forward, among other things, a curricular proposal for compulsory education to ensure that all students are able to develop the skills required in the 21<sup>st</sup> century, focusing more on developing socio-emotional skills and competencies rather than on rote learning. A key challenge for the reform during its implementation is to ensure clarity for all actors, as well as adequate flexibility to adapt to the diversity of educational contexts in Mexico, while continuing to move towards the system's goals (See Spotlight 3).

The Programme for Inclusion and Educational Equity (*Programa para la Inclusión y la Equidad Educativa*, 2014) aims to strengthen the capacities of schools and educational services that serve indigenous children, migrants, and students with special educational needs. It prioritises students with disabilities and with outstanding skills, as well as telesecondary and unitary multigrade schools. This is done through financial and academic support and infrastructure improvement of disadvantaged schools. In 2016, it catered to 170 000 students.

Mexico has also reviewed and expanded the programme *PROSPERA*, previously known as Opportunities (*Oportunidades*). This conditional cash transfer programme targets families living in poverty and focuses on health, nutrition and education. The cash transfers encourage families to send their children to school and to medical check-ups. Covering around 6.5 million Mexican families, the programme has helped to increase enrolment rates for secondary school, diminish the incidence of anaemia among children, and reduce poverty rates in rural areas. PROSPERA has maintained the main components of Opportunities while also expanding the programme's scope, for example, giving greater emphasis to early childhood development. It also co-ordinates, alongside other regions and education institutions, scholarships for vocational training and bachelor degrees, and facilitates student access to formal employment. Additionally, participants are granted easier access to microcredit, insurance and savings, which aims to foster entrepreneurship. Since its establishment in 1997 in Mexico, this model has been replicated in over 50 countries across the world.

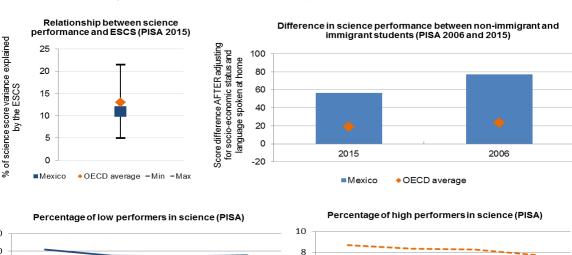


Figure 3. Selected equity and quality indicators for Mexico, PISA

Note: "Min"/ "Max" refer to OECD countries with the lowest/highest values. "ESCS" stands for economic, social and cultural status

2015

4

0

2006

2009

Mexico

2012

-- OECD average

2015

Source: OECD (2016), PISA 2015 results (Volume I): Excellence and Equity in Education, PISA, OECD Publishing, Paris. <a href="http://dx.doi.org/10.1787/9789264266490-en.">http://dx.doi.org/10.1787/9789264266490-en.</a>

2009

2012

--- OECD average

60 50

40 30

20 10

0

2006



## PREPARING STUDENTS FOR THE FUTURE: ENCOURAGING COMPLETION OF UPPER SECONDARY EDUCATION AND IMPROVING THE QUALITY AND RELEVANCE OF THE SKILLS ACQUIRED IN TERTIARY EDUCATION

Labour market perspectives and a country's capacity to effectively develop skills can play an important role in the educational decisions of the population. This is critical for Mexico, where attainment levels are low compared to other OECD countries. Unemployment rates for 25-34 year-olds with upper secondary education or post-secondary non-tertiary education are among the lowest in the OECD. In 2016, 5% of those with this level of education were unemployed, compared to the OECD average of 9.1%. The large increase in the relative demand for low-skilled labour generated by the boost in manufacturing activities and informal employment decreased the opportunity cost of leaving education, contributing to low graduation rates from upper secondary education. At the same time, Mexico is one of the countries in which a higher number of firms report having difficulties in finding the skills they require (30.9% against 14.8% in the OECD) and where, in turn, firms' investment in their workers is below the OECD average. Mexico also has one of the highest rates of 18-24 year-old NEET (not employed or in further education or training) in the OECD at 23.2%, while the OECD average is 15.3%. Although one in ten Mexican young men is NEET, more than three in ten young Mexican women are NEET.

Upper secondary education students in Mexico can go through one of three streams: an academic stream (*Bachillerato general*), a technical vocational stream (*Profesional técnico*), and a stream which combines both general and vocational education (*Bachillerato tecnológico*). All three streams lead to the award of an upper secondary diploma (*certificado*) and can provide access to higher education, although the diploma of the technical vocational stream is designed as an option to also allow access to the labour market (See Annex A). In order to promote completion rates and attainment levels, Mexico made upper secondary education compulsory in 2012, with the goal of attaining universal coverage by 2022. According to 2015 estimations, on average 56% of Mexicans will graduate from upper secondary education in their lifetime (compared to OECD average of 86%), 55% before the age of 25 (OECD average 80%).

Vocational education and training (VET) can make education more attractive and relevant to students' needs by being closely aligned to labour market needs, which limits student disengagement and ensures successful completion. Enrolment in vocational programmes at the upper secondary level in Mexico (38.2% of students) is lower than the average across OECD countries (45.7%). The VET system at secondary level in Mexico includes initiatives, such as mobile training units (*unidades móviles*) for remote regions where there are fewer learning opportunities, while at the post-secondary level, VET is provided through short courses in specialised technical professional institutes. Unlike most countries in PISA, in Mexico, 15-year-olds in pre-vocational or vocational programmes scored 20 points higher in science than those in general or modular programmes (after accounting for student and school socio-economic background). Recent education reforms have aimed to boost technical education in Mexico, such as through the introduction of the dual training system in 2013 (See recent policies).

Tertiary education coverage in Mexico has progressed significantly in recent years. About 21.8% of 25-34 year-olds had a tertiary level qualification in 2016, compared to the OECD average of 43.1%. Mexico has been encouraging young people to pursue careers and research in science, technology, engineering, and mathematics (STEM) fields, in line with labour market developments. In 2016, one quarter of adults with tertiary education had a degree in one of these fields, on par with the OECD average. An OECD 2017 report, identified the benefits of tertiary education for Mexican society and individuals. While employment rates for 25-34 year-olds with tertiary education are slightly lower than the OECD average: 79.9% were employed in 2016, while the OECD average was 82.9%, higher levels of education translate to better pay in Mexico. Holders of tertiary education credentials earn a wage premium of 102% on the wages of those with only upper secondary education, while the OECD average wage premium is 56%. Additionally, on average, 7 out of 10 tertiary graduates have a stable contract compared to only 2 in 10 of those who did not finish compulsory education. However, to realise the full benefits of investments in tertiary education, the skills acquired must be of high quality and relevant to the labour market. Unfortunately, employers often report difficulties in finding people with the right skills, and workers report skills mismatches with their jobs. Better regulation and quality assurance systems could ensure that higher education institutions are accountable not just for increasing access, but also for raising quality and relevance.

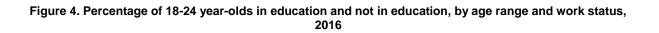
Key strengths	Key challenges
<ul> <li>Making upper secondary education compulsory in 2012 in order to increase attainment.</li> <li>Introduction of a dual training system that combines school and work-based learning (2013).</li> <li>Encouraging a student-focused, competency-based educational model and curriculum.</li> </ul>	<ul> <li>Improving the attractiveness and relevance of upper secondary education to encourage student engagement and school completion.</li> <li>Continuing to expand VET coverage, particularly at the upper secondary level.</li> <li>Offering support to disadvantaged students to increase educational attainment.</li> </ul>

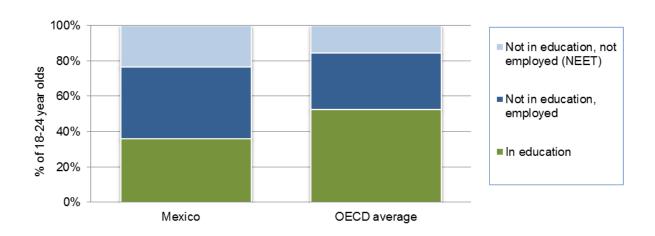


Mexico has been strengthening the dual training system, which was fully introduced in 2015. In 2016/2017, over 2 939 students, 482 firms and 149 schools participated in the programme. SEP is also increasing the supply of training and vocational programmes (e.g. National College of Technical Education, Colegio Nacional de Educación Profesional Técnica [CONALEP], Bécate, Modelo de Emprendedores de Educación Media Superior), while at the same time making it more relevant by expanding the private sector's involvement, increasing the number of apprenticeships in a company, and strengthening the model's vocational component. The National Productivity Committee has led efforts to facilitate the immersion of students in the labour market and the development of skills required by productive sectors and major clusters, such as the aerospace and automotive industry, through technological and polytechnic institutes that provide vocational training.

Mexico made upper secondary education compulsory in 2012 to promote completion rates. The initial goal was to attain universal coverage by 2022. Enrolment rates have already seen an increase from 65.9% (2012-2013) to 76.6% for the 2016-2017 school year, according to national data. To encourage students to stay in upper secondary and reduce the risk of social exclusion, the Movement against School Dropout (*Movimiento Contra el Abandono Escolar*) (2013/14) focuses on information dissemination, participatory planning, and community outreach. Activities include the physical and digital distribution of handbooks, and yearly workshops in schools on dropout prevention. Some evidence suggests that the policy has had a significant impact in reducing dropout, although it recommended continuing to strengthen monitoring mechanisms to ensure the efficacy of the programme. A complementary policy, the programme Constructing Yourself (*Construye T*, 2008), aims to foster the development of social and emotional skills in upper secondary public schools. It includes teacher training, support to prepare a diagnosis of strengths and weaknesses, a school project to respond to their challenges, and guidance for students. It has been implemented in almost 33% of schools by SEP, assisted by the United Nations Children's Fund (UNICEF), the United Nations Development Programme (UNDP), the United Nations Educational, Scientific and Cultural Organisation (UNESCO) and another 39 non-governmental organisations. Over 20 000 teachers and principals have received capacity-building training since 2013.

Disadvantaged students may also access scholarships offered by the government through the National Scholarship Programme (*Programa Nacional de Becas, 2014*). This programme acts as an umbrella for different scholarship programmes that cover primary, secondary and tertiary education. During 2016/17, the programme catered to about 30% of students in public schools, providing around 7.7 million with different types of scholarship. In 2014, the government developed an online platform where users can find information on over 200 different scholarships.





Source: OECD (2017), Education at a Glance 2017: OECD Indicators, OECD Publishing, Paris, <a href="http://dx.doi.org/10.1787/eag-2017-en">http://dx.doi.org/10.1787/eag-2017-en</a>.



## SCHOOL IMPROVEMENT: SUPPORTING TEACHERS AND SCHOOL LEADERS TO RAISE LEARNING OUTCOMES IN A COMPLEX EDUCATION SYSTEM

With over 36 million students, 2 million teachers and 260 000 institutions from primary to tertiary education, Mexico has one of the largest and most complex education systems among OECD countries. In 2014/15, 53% of primary schools in Mexico were multigrade (*multigrado*), which means that teachers cater to students at different levels of primary education in the same class. At the same time, a higher share of teachers in Mexico reported in TALIS 2013 working in schools where 30% or more of the students are from a socio-economically disadvantaged background. This was reported by 57% of teachers in primary education, 44% of teachers at the lower secondary level and 43% of teachers at the upper secondary level (the TALIS average is 16%, 20% and 14%, respectively). In terms of learning environments, Mexico scored around the OECD average in the index of classrooms conducive to learning in PISA 2015 (Figure 5). A slightly higher share of 15-year-old students in Mexico reported that they had either skipped at least a day of school in the two weeks prior to the PISA test (26%, compared to the OECD average of 20%) or had arrived late for school over the same period (49%, compared to 44% OECD average). In addition, 10.1% of students reported being frequently bullied, slightly higher than the OECD average (8.9%).

Attracting, retaining and developing good quality teachers are essential for improving the quality of learning in Mexico. Almost a quarter (24%) of teachers in Mexico reported in TALIS 2013 not feeling prepared to perform their work (the third largest share of teachers), compared with the TALIS 2013 average of 7%. Mexico had the lowest proportion of teachers who reported having completed a teacher education or training programme (62%) among countries participating in TALIS 2013. Moreover, the vast majority of teachers in Mexico reported that they did not have access to formal induction (72%) or mentoring (60%) programmes in their institutions, which their principal reported to be available (TALIS 2013 averages of 34% and 26%, respectively). However, teachers in Mexico reported higher participation rates than average in a number of different professional development activities, including courses and workshops (90%, compared to the TALIS average of 71%), networks of teachers (41%, compared to the TALIS average of 37%) or individual or collaborative research (49%, compared to the TALIS average of 31%). A large share of participation in Mexico was reported in qualifications programmes, with 43% of teachers reporting participating in one of these types of programmes, compared to a TALIS average of 18%. In order to support its teachers, Mexico has been working to strengthen teaching and school leadership through comprehensive reforms in recent years that have focused on overall professional pathways (See recent policies).

Good school leaders are essential for improving the quality of teaching and learning environments in schools. School leaders in Mexico score lower in the PISA 2015 index of educational leadership (measuring the levels of principals' engagement in leadership activities) at -0.23, compared to the OECD average of 0.01. Nevertheless, Mexico is taking important steps to strengthen school leadership. The General Law of the Professional Teacher Service (2013) (See Spotlight 2) aims to professionalise school leaders by introducing a transparent selection and recruitment process, as well as an induction process, during the first two years of practice.

Making the profession attractive to quality candidates will also depend on the overall conditions and status that teaching may be able to offer compared to other professions in the country. Teachers in Mexico have slightly longer net teaching hours than the OECD average: 800 hours at primary level, and 1 047 hours at lower secondary level, compared to OECD averages of 794 and 704 hours respectively in 2015. Teachers also catered to a larger number of students in 2015, with 27 at the primary level, compared to an OECD average of 15. At the same time, teachers' salaries have improved in recent years in Mexico. Between 2005 and 2015, statutory salaries of pre-primary and primary teachers increased by 12%, and by 13% for lower secondary teachers, which is double the average increase among OECD countries overall. Although they remain lower than the OECD average, except for upper secondary teachers, teachers' salaries in Mexico are competitive within the national context. Furthermore, 95.5% of teachers in Mexico said in TALIS that if they could choose again, they would still become a teacher, the highest among TALIS participants (with a TALIS average of 77.6%), while 49.5% of teachers felt that the teaching profession was valued in society, higher than the TALIS average (30.9%).

Key strengths	Key challenges
<ul> <li>Mexico's recent reforms of 2013 set the basis to professionalise the teaching profession from selection and throughout eachers' careers.</li> <li>Teacher salaries have increased and are competitive within the national context.</li> <li>The teaching profession reports feeling valued.</li> </ul>	Improving the provision and quality of resources (human and material) and offering relevant professional development opportunities to teachers and school leaders, particularly those working in challenging contexts to raise achievement.



The amendments to the General Law of Education (*Ley General de Educación*, 2013) introduced a number of policies to improve the quality of teaching and learning conditions in schools and raise student performance, such as full-day schooling for all students in basic education, improvement of school infrastructure, greater autonomy for schools, a teacher professional service, and promotion of system improvement with more transparency and consolidation of the evaluation authority. New legislation to consolidate a professional teaching service (National System of the Professional Teaching Service) aims to bring together and update different components of the teaching profession for both primary, lower and upper secondary education (See Spotlight 1).

Mexico introduced the National Certificates of Education Infrastructure for Schools (*Escuelas al CIEN*) in 2015, which is a programme aimed at improving school infrastructure. Schools are assessed by several key criteria, including: safe learning environments, healthy learning environments, or adequate supplies and equipment. The programme aims to improve: 1) structural safety and general operating conditions; 2) health services; 3) furniture and equipment; 4) drinking system; 5) accessibility; 6) areas of administrative services; 7) infrastructure for connectivity and 8) spaces for multiple uses. The programme has three steps: identification of school infrastructure and resources, allocation of funds to schools on a case-by-case basis (and helping them to improve their infrastructure), and certification of compliance with the required criteria. The school community then becomes responsible for maintenance. The goal was to improve 33 000 primary, secondary (lower and upper), and tertiary schools, thus benefitting over 6 million students, 1 in 3 of whom will belong to indigenous communities. The country has already refurnished 19 000 schools most in need of repair. In 2017, it had benefitted about 2.5 million students of basic and upper secondary education.

In 2016/17, about 3.6 million students benefitted from <u>full-day schooling</u> in 25 000 schools, which was an increase from 6 700 schools in 2012/13.

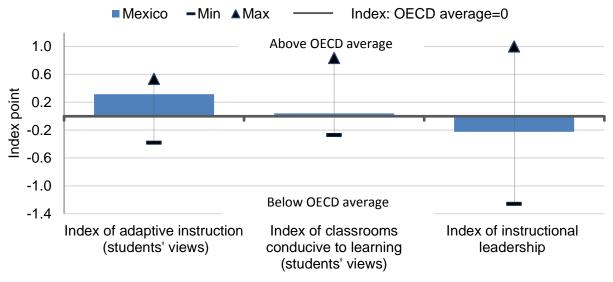


Figure 5. The learning environment, PISA 2015

Note: "Min"/ "Max" refer to OECD countries with the lowest / highest values Source: OECD (2016), PISA 2015 Results (Volume II): Policies and Practices for Successful Schools, PISA, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264267510-en.



#### Spotlight 2. The Professional Teaching Service in Mexico

Mexico recently created the Professional Teaching Service (*Servicio Profesional Docente*, 2013), which aims to bring together different policy components relative to the teaching profession in a coherent way for primary, lower and upper secondary education. The Professional Teaching Service sets out the basis for selection, promotion, incentives and tenure possibilities for teachers. Teacher appraisal and teacher education are seen as transversal processes during teaching career pathways. It also builds upon new and existing policies, such as the National Teaching Post Competition (2008-13), which aimed to improve the transparency and quality of the teacher selection process. Among the new policy components proposed are:

- The introduction of an induction process in the first two years of teachers' practice.
- The establishment of the main lines of a teacher appraisal process for all teachers.
- The establishment of new horizontal incentive mechanisms to include or replace the different voluntary programmes currently available in primary and lower secondary schools. These will reward good performance and relative improvement, and provide incentives for both schools and individuals.

To enter the profession, teacher candidates will have to pass a public selection process (*Concurso*). They will be assigned a mentor for the first two years and must get a positive appraisal to be confirmed in their post. As of 2016, candidates can come from higher education institutions other than the *Normales*, which may help to diversify and improve the offer of possible future teachers, although care should be taken to ensure that candidates from all qualifying institutions acquire the necessary set of skills and knowledge required to enter the profession. During 2016/17, about 195 000 candidates took the test to enter basic and upper secondary education, or for promotion to posts of leadership, supervision and technical-pedagogical advisors within upper secondary.

In addition, to assess competence and support development, a new appraisal system focused on school improvement has been introduced for teachers, school leaders and supervisors. The law assigns authorisation of the precise appraisal tools to the National Institute for Education Evaluation (Instituto Nacional para la Evaluación de la Educación, INEE) (See Evaluation and Assessment). A teacher's first or second unsuccessful appraisal will lead to individual coaching, and a third unsuccessful appraisal will mean dismissal. The law determined that teachers must undergo appraisal at least once every four years. However, as part of the implementation process, in 2016 it was made voluntary (except for those teachers who did not previously obtain favourable results), with almost 87% of teachers following an appraisal process that year. INEE reintroduced the mandatory nature of teacher appraisal in 2017 after making some adjustments to the process.

As part of this system, Mexico also aims to professionalise school leaders by introducing a selection and recruitment process, as well as an induction process during the first two years of practice. Public selection processes (concursos) will be organised, with candidates expected to have a minimum of two years' teaching experience and specific profiles determined by INEE and local and federal authorities. Under this law, school leaders will be confirmed in their post only after positive appraisal. Upper secondary principals will not have permanent positions and will return to the status of teacher if they are not reconfirmed in their post. Currently, over half of school leaders in primary schools are in fact teachers acting as school principals, without that role being formalised.

A new service of technical assistance to schools is being introduced to support teachers. This will be carried out by school leaders, supervisors and pedagogical advisors (*Asesores Técnico-pedagógicos*, ATP), who are recognised as support staff under the school improvement law. ATPs will also be subject to selection and recruitment processes and can participate in the different promotion mechanisms.

Also as part of this system, Mexico introduced the National Strategy for Continuous Training of Teachers (2016) in basic and upper secondary education. The programme is intended to improve the skills of teachers, in particular those showing below average qualifications in teacher appraisals. Staff will choose programmes - focused on content and/or pedagogical methodology - according to their needs and the results of their appraisal. Within the programme, teachers in basic education have access to over 500 courses and those in upper secondary education to 51 courses. The courses are provided in modular, distance or on-site format.



#### **EVALUATION AND ASSESSMENT: AIMING FOR GREATER SYSTEM TRANSPARENCY**

Mexico is making good progress in establishing evaluation and assessment mechanisms, although the country faces the challenge of effectively monitoring education improvement in a large system with a variety of cultural and socio-economic contexts, and with limited types of student assessment tools available. Mexico also needs to achieve the right balance between accountability and improvement, as well as effectively using research and the information contained in evaluations to achieve improvements. Mexico is working to address these challenges mainly through the Law of the National Institute for Education Evaluation (2013) (See recent policies), in a context where evaluations are still perceived as a mechanism for sanction rather than for improvement.

The Secretariat of Public Education (Secretaría de Educación Pública, SEP) and the National Institute for Education Evaluation (Instituto Nacional para la Evaluación de la Educación, INEE) are responsible at the federal level for the development and co-ordination of evaluation in the education system, including the National System for Educational Evaluation (Sistema Nacional de Evaluación Educativa, SNEE). Evaluation and assessment at the higher education level is carried out by the National Assessment Centre for Higher Education (CENEVAL), which administers standard exams for entry into a large part of undergraduate tertiary education and exams to assess qualifications at the completion stage of higher education courses.

External monitoring of schools is undertaken at the state level by the supervision systems of individual states. Around 80% of primary schools and 50% of lower secondary schools are inspected annually, with the main focus of inspections on the monitoring of compliance with rules and regulations. The results of inspections are not made publicly available and not widely shared among educational authorities. According to PISA 2015, schools in Mexico are slightly less likely than average to conduct a self-evaluation (86.1% compared to the OECD average of 93.2%) while levels of external school evaluations are average (73.9% compared to the OECD average of 74.6%). Education reforms focused on school improvement need to ensure that actors in particular at the school level, have the skills, competencies and tools with which to drive improvement. According to OECD evidence, the capacity of supervisors to engage in school evaluations in ways which may promote school improvement as well as resulting in accurate evaluation of the quality of a school's work needs to be strengthened. Ensuring that national advice on self-evaluation penetrates the system, or reinforcing the awareness of the rigour required to make self-evaluation lead to improvement were identified as ways in which Mexico could do this.

According to an OECD study, a teacher appraisal system that has an improvement component (emphasising developmental evaluation) and a career progression component (a model of certification of competencies for practice within and across career paths, associated with career advancement and based on a greater variety of instruments) can help to strengthen the teaching profession. In 2013, Mexico introduced a comprehensive teacher appraisal system, covering completion of probation as well as regular appraisal of performance. Evaluations of promotions and reward and incentive schemes focused on school improvement (See Spotlight 1). School leader appraisal in Mexico also became legislatively mandated during the same year. INEE became in charge of the approval of the evaluation tools for teacher appraisal. The appraisal systems of teachers and school leaders have been modified to address some concerns from stakeholders, including, for example, articulating the appraisal to teachers' daily lives and improving teacher professional development. Providing teachers with timely and evidence-informed feedback is important to strengthen the profession in Mexico. In TALIS 2013, a larger proportion of teachers in Mexico than on average across TALIS participants reported that the feedback they received has improved their teaching practice (86.3%, compared to the TALIS average of 62%).

Student performance assessment is primarily carried out through the National Plan for Learning Assessment (*Plan Nacional para la Evaluación de los Aprendizajes*, PLANEA). First implemented in 2015 in two domains (Spanish and mathematics), its second round for students of primary and lower secondary education took place as an internal assessment in 32 Mexican states in 2016. PLANEA aims to be a formative assessment that informs how students are progressing in the system. Unlike its predecessor ENLACE (*Evaluación Nacional del Logro Académico en Centros Escolares*), PLANEA is not intended for ranking of schools or other formal consequences for students, teachers or schools. Classroom-based assessments are carried out in schools. Secondary schools in Mexico were more likely than average to use standardised tests to make decisions on student promotion or retention (48%, above the OECD average of 31%), according to principals' reports in PISA 2015.

Key strengths	Key challenges
<ul> <li>The Law of the National Institute for Education Evaluation (2013) created a system of national evaluation and gave INEE autonomous status.</li> <li>PLANEA aims to be a more formative assessment and to offer information on students' progression.</li> <li>Introduction of a teacher appraisal system to provide a coherent view of the profession.</li> </ul>	<ul> <li>Strengthening the understanding of evaluation as an improvement instrument.</li> <li>Supporting teachers and school principals to make the best use of assessment results to improve learning environments and student outcomes in a diversity of cultural and socioeconomic contexts.</li> </ul>



The Law of the National Institute for Education Evaluation (2013) (INEE, *Instituto Nacional para la Evaluación de la Educacion*) created a system of national evaluation (*Sistema Nacional de Evaluación Educativa*, SNEE) in Mexico. It also gave INEE autonomy over the evaluation of the compulsory education system.

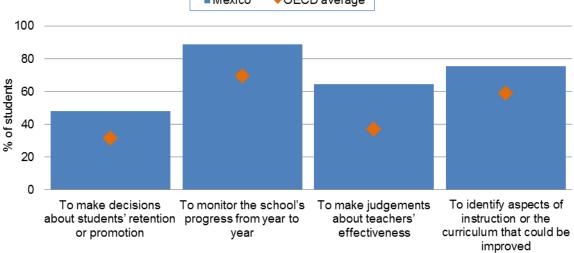
During the 2015-2016 school year, the Education Performance Appraisal (*Evaluación del Desempeño*) for teachers in primary, lower-secondary and upper secondary education took place for the first time, with over 150 000 teachers and principals participating. As pointed out by the OECD, over half of teachers appraised in 2015 obtained insufficient or sufficient results, which makes it important for Mexico to continue with the full implementation of the reform, rewarding the merit of teachers who do well in their job, and providing support for those in need. In 2016, the appraisal became mandatory for those who previously obtained insufficient results or those aiming to be certified as evaluators. Teachers aiming to access economic promotions could attend voluntarily and those not taking the evaluation were not penalised. The gradual appraisal of all teachers became mandatory in 2017. In addition, teachers from indigenous and multi-grade schools will be appraised by 2018/19. Teachers with below average qualifications in teacher assessments will also be required to attend professional development activities according to their needs.

The National Plan for Learning Assessment (*Plan Nacional para la Evaluación de los Aprendizajes*, PLANEA, 2015) has replaced the previous school and student assessments: *Evaluación Nacional del Logro Académico en Centros Escolares* (ENLACE) and *Examen para la Calidad y el Logro Educativo* (EXCALE). PLANEA combines three distinct standardised student assessments that monitor student learning outcomes at different levels of the education system, including national and sub-national data and information on schools and individual students:

- Evaluación de Logro referida al Sistema Educativo Nacional: Sample-based standardised student assessment used for national (or sub-national) monitoring of student learning outcomes. Results are made public at the national and sub-national levels. Covers last year of pre-school and grades 6, 9 and 12. Implemented by INEE every two years.
- Evaluación Diagnóstica Censal: Purely formative census-based standardised student assessment in Grade 4 to be implemented every year. Results are used formatively to inform subsequent teaching strategies. Implemented by schools and teachers at the beginning of the school year. Results are disclosed at the school level.
- Evaluación del Logro Referida a los Centros Escolares: Standardised student assessment in Grades 6,
   9 and 12 which covers all schools in the country with results made public at the school level.
   Implemented by SEP under the monitoring of INEE.

Figure 6. Percentage of students in schools where the principal reported assessments of students in national modal grade for 15-year-olds, by type of use reported, PISA 2015

Mexico OECD average



Source: OECD (2016), PISA 2015 Results (Volume II): Policies and Practices for Successful Schools, PISA, OECD Publishing, Paris, <a href="http://dx.doi.org/10.1787/9789264267510-en">http://dx.doi.org/10.1787/9789264267510-en</a>.



#### GOVERNANCE: A FEDERAL SYSTEM WHERE BETTER EXCHANGES AT THE SUB-NATIONAL LEVEL ARE KEY TO IMPROVING QUALITY

In 2015, Mexico was the 11<sup>th</sup> most populated country in the world, with 120 million people, of which about 23% lived in rural areas. At the same time, 45% of the total population were less than 25 years old. This is indicative of the importance of the education system in delivering quality education opportunities to eventually improve life opportunities for a large and diverse population. The national education system in Mexico is led by the federal Secretariat of Public Education (SEP). It is organised into four main undersecretariats: Basic Education (SEB), Upper Secondary Education (SEMS), Higher Education (SES), and Educational Policy Planning, Evaluation and Co-ordination (SPEC). Since 1992, Mexico has a decentralised education system in which 31 states have autonomy over their education systems and the operation of basic education services (pre-primary, primary, secondary and initial teacher education) within their territories, while the federal government retained the capacity of establishing norms and regulations, and also operates the basic education system of Mexico City. Other bodies that shape education policy include:

- The National Institute for Education Evaluation (*Instituto Nacional para la Evaluación de la Educación*, INEE), which has the main responsibility for evaluation of the education system.
- The National Council of Educational Authorities (*Consejo Nacional de Autoridades Educativas*, CONAEDU), which is composed of the Federal Government, representatives of the 31 state educational authorities, and is chaired by the Federal Secretary of Education. Its role is mainly advisory, but can lead to co-ordination of policies across states.
- The Federal Education Authority, which co-ordinates the basic education system in Mexico City and is part of the Secretary of Public Education.
- The National Council of Science and Technology (Consejo Nacional de Ciencia y Tecnología, CONACYT), which is a decentralised education public agency in charge of the development of science and technology policies in Mexico.
- Other education stakeholders include the National Union of Education Workers (*Sindicato Nacional de Trabajadores de la Educación*, SNTE), which is the largest teacher union in Mexico.
- A variety of non-government associations and parents' groups, which have also become increasingly involved in education improvement processes in the system.

Catering to considerable geographical, cultural and socio-economic diversity is a major challenge for the design and delivery of quality education services in Mexico. Reform processes in Mexico need to ensure appropriate capacity and distribution of responsibilities across the education system, and a stronger dialogue with the states and among the states needs to take place. The recently created five education regions (*Regiones Educativas*) could be helpful to this end, along with efforts to increase social participation in education (See recent policies). Furthermore, the OECD has <u>advised</u> Mexico to increase synergies between the Secretariat of Public Education, the Secretariat of Economy, the Secretariat of Finance, the Secretariat of Labour and CONACYT to improve the quality and relevance of education for the country's short and long-term development needs.

Mexico has varying degrees of school autonomy at the different levels of education, with lower levels at primary and lower secondary compared to greater autonomy at the upper secondary level. School autonomy levels over resource allocation are lower than the OECD average. According to PISA 2015, 35.2% of principals reported that the school has primary responsibility for resource allocation, compared to the OECD average of 53.8%. In addition, school autonomy levels over the curriculum are among the lowest in the OECD: 33.6% of principals reported in PISA 2015 that the school has primary autonomy over curriculum, compared to the OECD average of 73.4%. Recent reforms have aimed to provide greater autonomy to schools, while also aiming to improve their capacities (see recent policies).

On the other hand, higher education institutions can be attributed with a high level of autonomy in Mexico. Policy is developed at the federal level by the Undersecretariat for Higher Education (*Subsecretaría de Educación Superior*, SES), part of the Secretariat of Public Education.

Key strengths	Key challenges
<ul> <li>Significant efforts to engage societal actors and improve regional management through, for example, school participation councils and the establishment of education regions.</li> </ul>	<ul> <li>Strengthening the system capacity and organisation by improving the quality of the knowledge and skills of the staff responsible for system administration and for pedagogical practices and policies.</li> </ul>



In 2015, SEP divided the country into five different education regions (*Regiones Educativas*) - Northwest, Northeast, West, Centre, and South-Southeast. Through this organisation, the government aims to improve regional management and enable greater interactions among states to support and monitor each other to encourage progress towards goals, as well as stronger stakeholder engagement, especially at the local level. Mexico also expects to improve state-state and state-federation co-ordination, and foster co-operation between different education stakeholders and regional decision making.

The School at the Centre strategy (*Estrategia La Escuela al Centro*) (2016) aims to improve the delivery of education in schools. It is based on six lines of action: 1) diminishing the bureaucratic burden of schools; 2) directly allocating more resources to schools; 3) strengthening the School Technical Councils formed by teachers and school leaders; 4) encouraging greater social engagement through the Social Participation Councils (See below); 5) encouraging greater flexibility in the organisation of the school calendar to improve learning opportunities for students; and 6) promoting extracurricular learning during the summer, with cultural activities, sports and tutoring. Reports indicate a positive relationship between the stronger management skills of school principals and higher levels of student learning. During consultations with stakeholders it was widely recognised that reducing the administrative workload at schools would be an important achievement, however, stakeholders also highlighted the need to ensure that improvements in infrastructure prioritise the most disadvantaged schools.

Mexico has been working to expand the coverage of Participation Councils (<u>Consejos de Participación Social en la Educación</u>) in recent years, particularly in schools. In 2017, 93.7% of states had a state-level school participation council, and 66.3% of municipalities of Mexico had their own council. School councils are composed of parents, school principals, teachers, union representatives, former students and community members. They have been promoted to ensure parental and society engagement in education. SEP has trained the members of many of these councils in education assessment and management. SEP has also created a website to register and provide information and training for its affiliates.

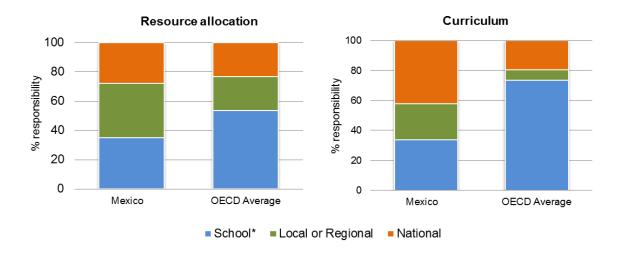


Figure 7. Distribution of responsibilities for school governance (2015)

Source: OECD (2016), PISA 2015 Results (Volume II): Policies and Practices for Successful Schools, PISA, OECD Publishing, Paris, <a href="http://dx.doi.org/10.1787/9789264267510-en">http://dx.doi.org/10.1787/9789264267510-en</a>.



#### Spotlight 3. Educational Reform in Mexico and the New Educational Model

In 2013, the Federal Government approved the Educational Reform of Mexico (*Reforma Educativa en México*) to improve the quality and equity of its education system. The reform builds upon the Pact for Mexico (*Pacto por México*) (2012) and changes to the Mexican Constitution during the same year. Further to this constitutional reform, Mexico promoted three fundamental education legislations: the amendment to the General Law of Education, the approval of the General Law of the Professional Teaching Service (See Spotlight 1), and the enactment of the Law of the National Institute for Education Evaluation.

The reform focused on seven key areas:

- 1. Improving and empowering schools in the short term to put them at the centre of the education system.
- 2. Improving infrastructure, equipment and educational supplies.
- 3. Professional development for teachers.
- 4. Revising the educational model.
- 5. Strengthening equity and inclusion.
- 6. Effectively connecting education and the labour market.
- 7. Improving the education system's administration and management for greater transparency and effectiveness.

The General Law of Education introduced elements to improve schools and raise student performance, such as free compulsory schooling in public education, full-day schooling for all students in basic education, improvement of school infrastructure, and compulsory upper secondary education. By 2015, more than half the goal for full-day schooling had been met: 58% of 40 000 schools. Additionally, 20 000 primary and lower secondary schools have been identified for infrastructure improvement.

Stemming from this reform, Mexico introduced in 2017 the New Educational Model for compulsory education: Educating for freedom and creativity (<u>Modelo Educativo para la Educación Obligatoria: Educar para la Libertad y la Creatividad</u>). This model was developed in collaboration with key stakeholders. A proposal was shared with the public between 2014 and 2016 through 18 consultation forums and received over 300 000 comments and suggestions from different stakeholders, including teachers, parents and entrepreneurs.

The New Educational Model defines Mexico's education goals for the 21<sup>st</sup> century. It is based upon five pillars, which range from pedagogical methods to the governance of the system, that aim to ensure quality education that prepares children for 21<sup>st</sup> century challenges:

- Efforts to develop a more explicit articulation between learning objectives and the content of education in basic and upper secondary education, while implementing pedagogical methods that focus on developing students' competences rather than rote learning.
- 2. Putting schools at the centre, providing them with greater autonomy, resources and support, and diminishing bureaucratic procedures.
- 3. Professionalising the teaching workforce, providing teachers with continuous professional development, and implementing periodic assessment.
- 4. Promoting greater equity and inclusion in the system, allocating more resources to the most disadvantaged schools and students.
- 5. Putting forward a governance system that recognises the diversity of stakeholders and supports greater co-ordination and stakeholder engagement.

The new curriculum for basic education was mainly implemented in the 2017/18 school year, as well as pilots for some specific components, such as curricular autonomy.

The national <u>consultations</u> conducted between 2014 and 2016 included very positive opinions on the core components of the educational model proposed, with its humanistic traits being the most positively appraised. At the same time, stakeholders also mentioned the need for a roadmap that can adapt to the diversity of educational contexts in Mexico, as they considered it important to ensure its continuity and success. In 2017, Mexico produced the Roadmap for the Implementation of the Educational Model (<u>Ruta para la implementación del Modelo Educativo</u>), which aims to establish and clarify the next steps for its implementation.



#### FUNDING: ADDRESSING UNDER-INVESTMENT AT ALL LEVELS

Expenditure on education in Mexico remains low in absolute terms, but corresponds to a comparatively high share of the country's GDP and total public expenditure. In 2014, expenditure on primary to tertiary education was equivalent to 5.4% of GDP, higher than the OECD average (5.2%). A relatively higher proportion of expenditure than the OECD average comes from private sources, at 20.6% of overall spending, compared to the OECD average of 15.4%. Public expenditure grew by 11.9% between 2008 and 2014, the biggest increase in the OECD over this period, while private expenditure increased by 13%% over the same period, a similar level of change as the OECD average. Over 90% of expenditure is allocated to recurrent costs – the majority of which is devoted to salaries.

Annual expenditure per student by educational institutions (in equivalent USD converted using PPP¹ for GDP²), at the primary level in 2014 was USD 2 896, among the lowest in the OECD (OECD average expenditure: USD 8 733). At the secondary level, Mexico spends USD 3 219 per student, compared to the OECD average of USD 10 106, while at the tertiary level (including spending on research and development), Mexico spends USD 8 949 per student, compared to the OECD average of USD 16 143. This means that expenditure in tertiary education per student is over three times the expenditure in primary educational institutions - the highest differential across all countries with available data, which on average spend 1.9 times as much per tertiary student than per primary student. Between 2008 and 2013, total expenditure (both public and private) on primary to post-secondary non-tertiary education increased by 18%, while the number of students at these levels of education increased by 5%, resulting in an increase of over 12% in expenditure per student. In tertiary education, where numbers have been rapidly expanding (by 26% between 2008 and 2013), expenditure per student in this period decreased by 9%, despite a 14% increase in the budget over the same period.

Mexico needs to provide sufficient resources to effectively put the school at the centre of its education system. It also needs to reflect on how resources can be allocated more efficiently to schools. Funding for schools comes from various sources: federal, state-level or private. Some schools receive funds from the Federal Government through the Secretariat of Public Education (SEP) and other state secretariats or federal agencies. Schools that receive state-level funds are administered and supervised by the state education authority. Private schools are self-financed and administered. A significant part of education services and funding has been usually provided through specific programmes. These programmes are structured interventions, with specific goals and activities, to which a budget is usually attached. They can be federal or state programmes, and in any given year several could be running at the same time in particular states.

An <u>OECD study</u> pointed out previously that the allocation of funds through programmes led to inequities in access to resources for more disadvantaged schools. <u>National evidence</u> also highlights that resources could be allocated more equitably across schools and municipalities, as rural, indigenous and/or multi-grade schools currently have less access to resources than more advantaged schools. Access to resources has also varied across states, the most disadvantaged being sometimes those that have benefitted the least, even with increases of expenditure. Policy efforts such as Full-Day Schooling, Schools at the Centre, or the new Fund for Education and Payroll Operating Expenses (FONE) aim to respond to these needs (See recent policies and governance).

#### **Key strengths** Key challenges The education reform aims to allow the federal Increasing resources allocated to education, in government to better monitor the teachers' payroll. particular in compulsory schooling. This reform also introduced the single teacher Ensuring stability and equity in resource salary negotiation, which aims to strengthen the allocation to improve performance and reduce efficiency and accountability of the system. inequalities. The new Fund for Education and Payroll Operating Aligning the allocation of resources to system-Expenses (FONE, 2015) will lead to a reallocation level priorities and policies. of resources which will aim to provide more equitable funding, in particular for disadvantaged regions.



Within the framework of the Law of Fiscal Co-ordination (2013), Mexico created the Fund for Education and Payroll Operating Expenses (National Fund of Allocations for the Teachers' Payroll and Operative Expenditure, FONE) which was officially introduced in 2015. FONE aims to reallocate funds more efficiently and equitably to allow for greater funding to reach the most disadvantaged regions. These regions had been obtaining decreasing federal resources under the previous resource allocation formula. FONE will be used to fund education services and teachers colleges (*Educación Normal*).

Within the framework of the education reform, a single teacher salary negotiation was introduced in 2014. Currently, the negotiations are held between the federal government and the National Educational Workers Union (Sindicato Nacional de Trabajadores de la Educación, SNTE). Previously, negotiations were also held between SNTE and local authorities. This has aimed to improve transparency and allow for clear teacher salary management and negotiation processes.

As part of FONE, the government has taken steps to centralise the payment of teachers' salaries, which until now had been managed by state governments. Through this centralisation, the central government aims to be able to verify the identity and occupation of each individual included in the payroll. In 2015, FONE spent over EUR 16 million on the payroll of 988 000 workers from the basic education and teachers college systems that fulfil 1 847 656 job positions. In 2016, the government established a budget of EUR 16 million for the payment of 1 854 337 job positions. In addition to increasing transparency, the centralisation of salaries has allowed the irregular status of over 40 000 teachers to be identified and rectified.

Expenditure per student at different levels of education, 2014 18000 16000 14000 Expenditure in USD 12000 10000 8000 6000 4000 2000 0 Pre-primary Primary and lower Upper secondary and post-Tertiary secondary secondary non-tertiary Mexico OECD average Change in expenditure per student, primary Change in expenditure per student, tertiary secondary and post-secondary non-tertiary education (2010=100) education (2010=100) 110 110 100 100 90 90 80 80 70 70

Figure 8. Annual expenditure per student (2014) and recent trends, by level of education.

Source: OECD (2016), Education at a Glance 2016: OECD Indicators, OECD Publishing, Paris, <a href="http://dx.doi.org/10.1787/eag-2016-en">http://dx.doi.org/10.1787/eag-2016-en</a>.

2014

2008

Mexico

2011

OECD average

2014

2008

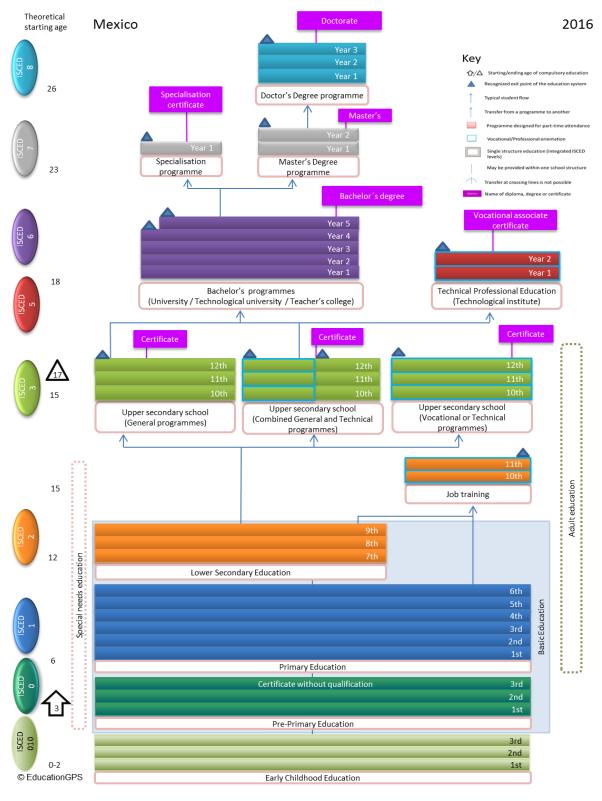
Mexico

2011

OECD average



#### ANNEX A: STRUCTURE OF MEXICO'S EDUCATION SYSTEM



Source: OECD (2018), "Mexico: Overview of the Education System", OECD Education GPS, <a href="http://gpseducation.oecd.org/Content/MapOfEducationSystem/MEX/MEX\_2011\_EN.pdf">http://gpseducation.oecd.org/Content/MapOfEducationSystem/MEX/MEX\_2011\_EN.pdf</a>



#### **ANNEX B: STATISTICS**

	List of key indicators	Mexico	Average or total	Min OECD	Max OEC		
	Background information						
Economy							
1	GDP per capita, 2014, in equivalent USD converted using PPPs (OECD Factbook 2015/2016)	17 831	38 865	17 831	97 273		
2	GDP growth 2014 (OECD Factbook 2015/2016)	2.1%	1.8%	-0.4%	5.2%		
Society							
3	Population density, inhab/km², 2016 (OECD Statistics)	62	37	3	511		
4	Population aged less than 15 as a percentage of total population, 2010 (OECD Factbook 2014)	29.6	18.6	13.1	29.6		
5	Foreign-born population as a percentage of total population, 2013 or latest available year (OECD Factbook 2015)	0.8	n/a	0.8	43.7		
	Education outcomes						
6	Mean performance in science (PISA 2015)	416	493	416	538		
	Average three-year trend in performance across PISA assessments,	by domain (P	ISA 2015) <sup>4,5</sup>				
	Science performance	1.7	-1.4	-10.6	7.6		
7	Mathematics performance	5.3	-1.0	-9.7	10.1		
	Reading performance	2.7	0.7	-5.2	9.2		
8	Enrolment rates of 3-year-olds in early childhood education and pre- primary education as a percentage of the population of the same age group, 2015 (EAG 2017)		77.8%	9.1%	100.0%		
9	% of 25-64 year-olds whose highest level of attainment is lower secondary education, 2016 (EAG 2017)	25.8%	14.3%	0.6%	33.1%		
	Educational attainment of the population aged 25-34 by type of attainment	nent					
	At least upper secondary education, 2016 (EAG 2017)	46.7%	84.6%	46.7%	98.3%		
10	Tertiary education, 2016 (EAG 2017)	21.8%	43.1%	21.8%	70.0%		
	Vocational upper-secondary or post-secondary non-tertiary education, 2015 (EAG 2016)	m	26.5%	4.5%	57.7%		
	Unemployment rates of 25-34 year-olds by educational attainment, 20	)16 (EAG 2017	7)				
	Below upper secondary	3.5%	16.8%	3.5%	37.8%		
11	Upper secondary and post-secondary non-tertiary	5.0%	9.1%	4.2%	30.2%		
	Tertiary education	6.6%	6.6%	2.5%	28.0%		
	Students: Raising outcomes						
olicy leve	er 1: Equity and quality						
12	First age of selection in the education system (PISA 2015)	15	14	10	16		
	Students performing at the highest or lowest levels in science (%) (PISA 2015)						
13	Students performing below Level 2	47.8%	21.3%	8.8%	47.8%		
	Students performing at Level 5 or above	0.1%	7.7%	0.1%	15.3%		
14	Percentage of students in schools where students are grouped by ability into different classes for all subjects, PISA 2015	10.0%	7.8%	0.0%	56.1%		
15	Percentage of students whose parents reported that the schooling available in their area includes two or more other schools, PISA 2015	41.7%	36.8%	20.4%	56.9%		





#	List of key indicators	Mexico	Average or total	Min OECD	Max OECD
16	Percentage of students reporting that they have repeated at least a grade in primary, lower secondary or upper secondary schools (PISA 2015)		11.3	0.0	34.0
17	Percentage of variance in science performance in PISA test explained by ESCS (PISA 2015) <sup>4</sup>	10.9%	12.9%	4.9%	21.4%
18	Score difference in science performance in PISA between non- immigrant and immigrant students AFTER adjusting for socio- economic status (PISA 2015) <sup>4</sup>	63	31	-5	83
19	Score differences between boys and girls in science (PISA 2015) <sup>4</sup>	8	4	-19	19
Policy leve	er 2: Preparing students for the future				
20	Adjusted mean proficiency in literacy among adults aged 16-64 on a scale of 500 (Survey of Adult Skills, 2012)	NP	267.7	220.1	296.2
21	Difference in literacy scores between youngest (25-34) and oldest (55-65) adults (Survey of Adult Skills, 2012)	NP	15.6	-8.3	37.6
	Share of students of all ages in upper secondary education in 2015 fo	llowing:			
-00	General programmes (EAG 2017)	61.8%	55.6%	26.8%	100.0%
22	Vocational programmes (EAG 2017)	38.2%	45.7%	8.3%	73.2%
	Combined school and work-based programmes (EAG 2017)	а	17.0%	0.4%	59.0%
23	First-time graduation rates from tertiary education (EAG 2017)	26.1%	49.1%	24.5%	76.1%
24	% of 18-24 year-olds not in education, employment or training, 2016 (EAG 2017)		15.3%	5.2%	33.0%
	Institutions: Improving schools	i			
Policy leve	er 3: School improvement				
	The Learning Environment - PISA 2015		_		
0.5	Mean index of adaptive instruction in science lessons	0.32	0.01	-0.38	0.53
25	Mean index of disciplinary climate based on students' reports	0.04	0.00	-0.27	0.83
	Mean Index of Instructional leadership	-0.23	0.01	-1.26	1.00
26	Percentage of teachers in lower secondary education above the age of 50, 2015 (EAG 2017)	m	35.9%	17.5%	59.6%
	Number of teaching hours per year in public institutions by education	level, 2015 (E.	AG 2017)		
27	Primary education	800	794	573	1157
	Lower secondary education, general programmes	1047	704	486	1157
28	Ratio of actual teachers' salaries to earnings for full-time, full-year adult workers with tertiary education, lower secondary education, general programmes, 2015 (EAG 2017)		0.88	0.58	1.30
29	Proportion of teachers who believe the teaching profession is valued in society (TALIS 2013)		30.9%	4.0%	66.5%
30	Proportion of teachers who would become a teacher again if they could choose (TALIS 2013)	95.5%	77.6%	53.4%	95.5%



#	List of key indicators	Mexico	Average or total	Min OECD	Max OECI			
Policy lev	er 4: Evaluation and assessment to improve student outcomes							
	Percentage of students in schools where the following arrangements school are used (PISA 2015):	aimed at qual	ity assurand	ce and impro	vement at			
31	Internal/Self-evaluation	86.1%	93.2%	74.8%	100.0%			
	External evaluation	73.9%	74.6%	20.8%	97.4%			
	Percentage of students whose school principals reported that standardised tests are used for the following purposes (PISA 2015):							
	To make decisions about students' retention or promotion	48.0%	31.3%	3.4%	60.6%			
32	To monitor the school's progress from year to year	88.7%	69.4%	26.2%	97.7%			
	To make judgements about teachers' effectiveness	64.4%	37.0%	4.4%	87.5%			
	To identify aspects of instruction or the curriculum that could be improved	75.3%	58.9%	14.1%	92.4%			
33	Percentage of lower secondary education teachers reporting appraisal/feedback from the school principal on their work at least once per year (TALIS 2013)	84.5%	66.1%	11.2%	96.8%			
	Systems: Organising the system	n			<u>'</u>			
Policy lev	er 5: Governance							
	Distribution of responsibilities for school governance in resource allo	cation and cur	riculum, 20	15 (PISA 201	5)			
	National government (Resource allocation)	27.9%	23.1%	0.0%	69.9%			
	Local or Regional government (Resource allocation)	36.9%	23.1%	0.0%	72.9%			
34	School (Resource allocation)	35.2%	53.8%	11.2%	92.9%			
	National government (Curriculum)	42.1%	19.6%	0.0%	96.5%			
	Local or Regional government (Curriculum)	24.3%	7.0%	0.0%	42.2%			
	School (Curriculum)	33.6%	73.4%	3.5%	97.0%			
Policy lev	er 6: Funding							
35	Expenditure on education as a percentage of GDP (from primary to tertiary), 2014 (EAG 2017)	5.4%	5.2%	3.6%	6.6%			
	Annual expenditure per student by educational institutions, for all ser for GDP, 2014 (EAG 2017)	vices, in equiv	alent USD c	onverted usi	ng PPPs			
	Pre-primary education	m	8 723	4 432	21 210			
36	Primary education	2 896	8 733	2 896	21 153			
	Secondary education	3 219	10 106	3 219	21 595			
	Tertiary education	8 949	16 143	6 952	46 526			
Relative proportions of public and private expenditure on educational institutions, 2014 (EAG 20								
37	Public sources	79.4%	84.6%	64.4%	99.0%			
	All private sources	20.6%	15.4%	1.0%	35.6%			
	Index of change in expenditure on educational institutions 2014, EAG	2017 (constan	nt prices, 20	10=100)				
38	Public sources	112	103	86	147			
	All private sources	114	113	69	192			

- Notes

  1. The average, total, minimums and maximums refer to OECD countries except in TALIS and the Survey of Adult Skills, where they refer to participating

- 2. "m": included when data is not available.
  3. "NP": included if the country is not participating in the study.
  4. Statistically significant values of the indicator are shown in bold (PISA 2015 only).
- 5. The average three year trend is the average change in PISA score points from a country's/economy's earliest participation in PISA to PISA 2015.
   6. "a": included when the category is not applicable.



#### REFERENCES AND FURTHER READING

- BBC (2016), Cómo se evalúa a los maestros en los países con la mejor educación del mundo, <a href="http://www.bbc.com/mundo/noticias-36591625">http://www.bbc.com/mundo/noticias-36591625</a> (accessed 26 September 2017).
- Cámara de Diputados/INEE (2015), Reforma Educativa: Marco Normativo.
- Consejo Nacional de Fomento Educativo (CONAFE) (2010), Educación Preescolar Comunitaria. La intervención educativa en el medio rural, indígena y en contextos migrantes, CONAFE, Mexico, <a href="http://www.conafe.gob.mx/educacioncomunitaria/atencionpoblacionindigena/epc-intervencion-edu.pdf">http://www.conafe.gob.mx/educacioncomunitaria/atencionpoblacionindigena/epc-intervencion-edu.pdf</a>.
- Coordinación Nacional del Servicio Profesional Docente (CNSPD), (2017), Lineamientos generales para la prestación del Servicio de Asistencia Técnica a la Escuela en la Educación Básica, CNSPD, <a href="http://servicioprofesionaldocente.sep.gob.mx/content/general/docs/2017/LINEAMIENTOS\_SATE.pdf">http://servicioprofesionaldocente.sep.gob.mx/content/general/docs/2017/LINEAMIENTOS\_SATE.pdf</a>.
- DOF (2017), Acuerdo Número 07/06/17 Por El Que Se Establece El Plan Y Los Programas De Estudio Para La Educación Básica: Aprendizajes Clave Para La Educación Integral, Diario oficial de la República, <a href="http://www.dof.gob.mx/nota\_detalle.php?codigo=5488475&fecha=29/06/2017">http://www.dof.gob.mx/nota\_detalle.php?codigo=5488475&fecha=29/06/2017</a> (accessed 7 February 2018).
- DOF (2017), *Modelo Educativo para la Educación Obligatoria*, Diario oficial de la República, <a href="http://www.dof.gob.mx/nota\_detalle.php?codigo=5488338&fecha=28/06/2017">http://www.dof.gob.mx/nota\_detalle.php?codigo=5488338&fecha=28/06/2017</a> (accessed 7 February 2018).
- DOF (2013), Decreto por el que se expide la Ley General del Servicio Profesional Docente, Diario oficial de la República, <a href="http://www.dof.gob.mx/nota\_detalle.php?codigo=5313843&fecha=11/09/2013">http://www.dof.gob.mx/nota\_detalle.php?codigo=5313843&fecha=11/09/2013</a> (accessed 19 February 2018).
- DOF (2002), Decreto por el que se aprueba el diverso por el que se adiciona el artículo 3o., en su párrafo primero, fracciones III, V y VI, y el artículo 31 en su fracción I, de la Constitución Política de los Estados Unidos Mexicanos, Diario oficial de la República, <a href="http://www.dof.gob.mx/nota\_detalle.php?codigo=718015&fecha=12/11/2002">http://www.dof.gob.mx/nota\_detalle.php?codigo=718015&fecha=12/11/2002</a> (accessed 19 February 2018).
- Gobierno (n.d), Programa de la reforma Educativa Official Website, <a href="http://basica.sep.gob.mx/site/prore">http://basica.sep.gob.mx/site/prore</a> (accessed online 7 February 2018). INEE (2017), Evaluación del Desempeño Docente 2017, Instituto Nacional para la Evaluación de la Educación, Mexico, <a href="http://www.inee.edu.mx/index.php/servicio-profesional-docente/evaluacion-del-desempeno-docente-2017">http://www.inee.edu.mx/index.php/servicio-profesional-docente/evaluacion-del-desempeno-docente-2017</a>.
- INEE (2016), La Educación Obligatoria en México: Informe 2016, México, INEE, http://www.inee.edu.mx/index.php/sala-deprensa/notas-informativas/2256-informe-2016 or http://www.inee.edu.mx/images/stories/2016/informe\_2016/Informe2016-4.pdf.
- INEE (2015), Panorama Educativo de México: Indicadores del Sistema Educativo Nacional 2014, Instituto Nacional para la Evaluación de la Educación, Mexico, <a href="http://www.inee.edu.mx/images/2015/Panorama-2014/PEM2014-4.pdf">http://www.inee.edu.mx/images/2015/Panorama-2014/PEM2014-4.pdf</a>.
- INEE (2015), "¿Qué es PLANEA?", Instituto Nacional para la Evaluación de la Educación, Mexico, <a href="http://www.inee.edu.mx/images/stories/2015/planea/fasciulosnov/Planea\_1.pdf">http://www.inee.edu.mx/images/stories/2015/planea/fasciulosnov/Planea\_1.pdf</a>.
- Mexicanos Primero (2014), Los invisibles Las niñas y los niños de 0 a 6 años: Estado de la Educación en México 2014, Mexicanos Primero.
- PIPE (2016), Consulta Sobre El Modelo Educativo 2016, Programa Interdisciplinario sobre Política y Prácticas Educativas, Mexico D.F.
- OECD (2018), Skills in Ibero-America: Insights from PISA 2015, OECD Publishing, Paris.
- OECD (2017), OECD Economic Surveys: Mexico 2017, OECD Publishing, Paris, http://dx.doi.org/10.1787/eco\_surveys-mex-2017-en.
- OECD (2017), Education at a Glance 2017: OECD Indicators, OECD Publishing, Paris, <a href="http://dx.doi.org/10.1787/eag-2017-en">http://dx.doi.org/10.1787/eag-2017-en</a>.

### **MEXICO**



- OECD (2017), PISA 2015 Results (Volume III): Students' Well-Being, OECD Publishing, Paris, <a href="http://dx.doi.org/10.1787/9789264273856-en">http://dx.doi.org/10.1787/9789264273856-en</a>.
- OECD (2017), PISA 2015 Results (Volume IV): Students' Financial Literacy, PISA, OECD Publishing, Paris, <a href="http://dx.doi.org/10.1787/9789264270282-en">http://dx.doi.org/10.1787/9789264270282-en</a>.
- OECD (2017), *Building an Inclusive Mexico: Policies and Good Governance for Gender Equality*, OECD Publishing, Paris, <a href="http://dx.doi.org/10.1787/9789264265493-en">http://dx.doi.org/10.1787/9789264265493-en</a>.
- OECD (2016), PISA 2015 Results (Volume I): Excellence and Equity in Education, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264266490-en.
- OECD (2016b), PISA 2015 Results (Volume II): Policies and Practices for Successful Schools, OECD Publishing, Paris, <a href="http://dx.doi.org/10.1787/9789264267510-en">http://dx.doi.org/10.1787/9789264267510-en</a>.
- OECD (2016), Education at a Glance 2016: OECD Indicators, OECD Publishing, Paris, <a href="http://dx.doi.org/10.1787/eag-2016-en">http://dx.doi.org/10.1787/eag-2016-en</a>.
- OECD (2015), *Education Policy Outlook 2015: Making Reforms Happen*, OECD Publishing, Paris, <a href="http://dx.doi.org/10.1787/9789264225442-en">http://dx.doi.org/10.1787/9789264225442-en</a>.
- OECD (2015), *OECD Economic Surveys: Mexico 2015*, OECD Publishing, Paris, <a href="http://dx.doi.org/10.1787/eco\_surveys-mex-2015-en">http://dx.doi.org/10.1787/eco\_surveys-mex-2015-en</a>.
- OECD (2015), Serie "Mejores Políticas" México: Políticas prioritarias para fomentar las habilidades y conocimientos de los Mexicanos para la productividad y la innovación, OECD Publishing, Paris, <a href="https://www.oecd.org/mexico/mexico-politicas-prioritarias-para-fomentar-las-habilidades-y-conocimientos-de-los-Mexicanos.pdf">https://www.oecd.org/mexico/mexico-politicas-prioritarias-para-fomentar-las-habilidades-y-conocimientos-de-los-Mexicanos.pdf</a>.
- OECD (2014), TALIS 2013 Results: An International Perspective on Teaching and Learning, TALIS, OECD Publishing, Paris, <a href="http://dx.doi.org/10.1787/9789264196261-en">http://dx.doi.org/10.1787/9789264196261-en</a>.
- OECD (2014), Education at a Glance 2014: OECD Indicators, OECD Publishing, Paris, <a href="http://dx.doi.org/10.1787/eag-2014-en">http://dx.doi.org/10.1787/eag-2014-en</a>.
- OECD (2014), New Insights from TALIS 2013: Teaching and Learning in Primary and Upper Secondary Education, OECD Publishing, http://dx.doi.org/10.1787/9789264226319-en.
- OECD (2013), *Getting It Right: Strategic Agenda for Reforms in Mexico*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264190320-en.
- OECD (2013), Synergies for Better Learning: An International Perspective on Evaluation and Assessment, OECD Reviews of Evaluation and Assessment in Education, OECD Publishing, Paris, <a href="http://dx.doi.org/10.1787/9789264190658-en">http://dx.doi.org/10.1787/9789264190658-en</a>.
- OECD (2013), *Improving Education in Mexico: A State-level Perspective from Puebla*, OECD Publishing, Paris, <a href="http://dx.doi.org/10.1787/9789264200197-en">http://dx.doi.org/10.1787/9789264200197-en</a>.
- OECD (2013), Education Policy Outlook Mexico, OECD Publishing, Paris.
- OECD (2013), First Results from the Survey of Adult Skills, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264204256-en.
- OECD (2012), OECD Reviews of Evaluation and Assessment in Education: Mexico, OECD Publishing, Paris.
- OECD (2010), Improving Schools: Strategies for Action in Mexico, OECD Publishing, Paris.
- OECD (2007), *OECD Economic Surveys: Mexico* 2007, OECD Publishing, Paris. <a href="http://dx.doi.org/10.1787/eco-surveys-mex-2007-en">http://dx.doi.org/10.1787/eco-surveys-mex-2007-en</a>.
- OECD (2005), *OECD Economic Surveys: Mexico 2005*, OECD Publishing, Paris. http://dx.doi.org/10.1787/eco\_surveys-mex-2005-en.



- OECD (2002), OECD Economic Surveys: Mexico 2002, OECD Publishing, Paris, <a href="http://dx.doi.org/10.1787/eco-surveys-mex-2002-en">http://dx.doi.org/10.1787/eco-surveys-mex-2002-en</a>.
- Planea (n.d), *Plan Nacional para la Evaluación de los Aprendizajes (Planea)* Official website, <a href="http://www.planea.sep.gob.mx/bienvenida/">http://www.planea.sep.gob.mx/bienvenida/</a> (accessed 02 October 2017).
- SEP (n.d), Servicio Profesional Docente Official Website, Secretaría de Educación Pública, <a href="http://servicioprofesionaldocente.sep.gob.mx">http://servicioprofesionaldocente.sep.gob.mx</a> (accessed 2 October 2017).
- SEP (2017), External Assessment of Federal Programmes (Evaluación Externa de Programas Federales), Secretaría de Educación Pública, <a href="https://www.gob.mx/sep/acciones-y-programas/evaluacion-externa-de-programas-federales">https://www.gob.mx/sep/acciones-y-programas/evaluacion-externa-de-programas-federales</a> (accessed 01 October 2017).
- SEP (2017), Lineamientos generales para la prestación del Servicio de Asistencia Técnica a la Escuela en la Educación Básica, Secretaría de Educación Pública, <a href="http://servicioprofesionaldocente.sep.gob.mx/content/general/docs/2017/LINEAMIENTOS\_SATE.pdf">http://servicioprofesionaldocente.sep.gob.mx/content/general/docs/2017/LINEAMIENTOS\_SATE.pdf</a>.
- SEP (2017), Ruta para la implementación del Modelo Educativo, Secretaría de Educación Pública, <a href="https://www.gob.mx/cms/uploads/attachment/file/207248/10">https://www.gob.mx/cms/uploads/attachment/file/207248/10</a> Ruta de implementación del modelo edu <a href="mailto:cativo">cativo</a> DIGITAL re FINAL 2017.pdf.
- SEP (2017), Planes de estudio de referencia del componente básico del marco curricular común de la Educación Media Superior, Secretaría de Educación Pública, https://www.gob.mx/cms/uploads/attachment/file/241519/planes-estudio-sems.pdf.
- SEP (2017), Modelo Educativo Para la Educación Obligatória, Secretaría de Eucación Publica,

  <a href="https://docs.google.com/gview?url=http://www.gob.mx/cms/uploads/attachment/file/207252/Modelo Educativo OK.pdf">https://docs.google.com/gview?url=http://www.gob.mx/cms/uploads/attachment/file/207252/Modelo Educativo OK.pdf</a>.
- SEP (2015), Análisis del Movimiento contra el Abandono Escolar en la Educación Media Superior, Secretaría de Educación Pública, http://www.sems.gob.mx/work/models/sems/Resource/11390/8/images/reporte\_abandono.pdf.
- SEP (2015), Explicación ampliada de la Reforma Educativa, Secretaría de Eucación Publica,

  <a href="http://reformas.gob.mx/wpcontent/uploads/2014/04/EXPLICACION\_AMPLIADA\_REFORMA\_EDUCATIVA.">http://reformas.gob.mx/wpcontent/uploads/2014/04/EXPLICACION\_AMPLIADA\_REFORMA\_EDUCATIVA.</a>
  pdf.
- SEP (2016), La Escuela al Centro (The School at the Centre), Secretaría de Educación Pública, <a href="https://www.gob.mx/sep/articulos/la-escuela-al-centro-19049">https://www.gob.mx/sep/articulos/la-escuela-al-centro-19049</a> (accessed 10 January 2018).
- SEP (n.d), *Reforma Educativa Transparencia Presupuestaria Official Website*, Secretaría de Educación Pública, <a href="http://www.reformaeducativa.transparenciapresupuestaria.gob.mx/">http://www.reformaeducativa.transparenciapresupuestaria.gob.mx/</a> (accessed 7 February 2018).
- SEP (n.d), *Nuevo Modelo Educativo Official Website*, Secretaría de Educación Pública, <a href="https://www.gob.mx/sep/documentos/nuevo-modelo-educativo-99339">https://www.gob.mx/sep/documentos/nuevo-modelo-educativo-99339</a> (accessed 7 February 2018).
- SEP (n.d), *Principales Cifras del Sistema Educativo Nacional*, 2015-2016, Versión Bolsillo, <a href="http://www.planeacion.sep.gob.mx/estadisticaeindicadores.aspx">http://www.planeacion.sep.gob.mx/estadisticaeindicadores.aspx</a> (accessed 19 February 2018).
- World Bank (2017), At a Crossroads Higher Education in Latin America and the Caribbean, Washington D.C.
- World Bank (2014), A Model from Mexico for the World, <a href="http://www.worldbank.org/en/news/feature/2014/11/19/un-modelo-de-mexico-para-el-mundo">http://www.worldbank.org/en/news/feature/2014/11/19/un-modelo-de-mexico-para-el-mundo</a> (accessed 27 September 2017).



#### **NOTES**

- 1: PPP: Purchasing Power Parity.
- 2: Gross Domestic Product.

This paper is published under the responsibility of the Secretary-General of the OECD. The opinions expressed and arguments employed herein do not necessarily reflect the official views of OECD member countries.

This document, as well as any data and any map included herein, are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.

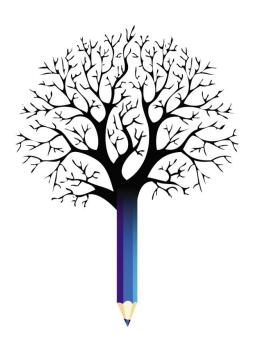
Photo credits: Cover © Shutterstock/Sasha Chebotarev

#### © OECD 2018

You can copy, download or print OECD content for your own use, and you can include excerpts from OECD publications, databases and multimedia products in your own documents, presentations, blogs, websites and teaching materials, provided that suitable acknowledgment of the source and copyright owner is given. All requests for public or commercial use and translation rights should be submitted to <a href="mailto:rights@oecd.org">rights@oecd.org</a>. Requests for permission to photocopy portions of this material for public or commercial use shall be addressed directly to the Copyright Clearance Center (CCC) at <a href="mailto:info@copyright.com">info@copyright.com</a> or the Centre français d'exploitation du droit de copie (CFC) at <a href="mailto:contact@cfcopies.com">contact@cfcopies.com</a>.

#### How to cite this document:

OECD (2018), Education Policy Outlook: Mexico, available at: <a href="https://www.oecd.org/education/policyoutlook.htm">www.oecd.org/education/policyoutlook.htm</a>



www.oecd.org/edu/policyoutlook.htm



