# Chapter 1. An overview of the education system in Mexico

*This chapter provides an overview of Mexico's education system and its context. While the Mexican economy has experienced an important transformation since the 1980s, social inequalities prevail across the country. The education system can contribute to tackle them and provide a better future for Mexico.*

*Mexico has a large and complex education system that caters to almost 26 million students in basic education, with diverse backgrounds and an indigenous population speaking more than 64 different languages. The system is characterised by complex governance arrangements and a large teaching workforce working across more than 225 000 schools. Comprehensive evaluation and assessment practices were recently developed. Student learning has improved since 2000 but it still stands below the OECD average. Recent reforms aim to target equity, adapt to the globalised environment of the 21st century, improve student learning and well-being, construct a professional teaching career and support schools. For the system to deliver high-quality education to all students, it will need to continue building from these foundations.*

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

## Introduction and background of the report

Countries across the world are facing a range of transformations that are influencing their education systems. These include globalisation, sociodemographic diversification, technological changes and digitalisation, increased information and accountability, and a realisation of the need to tackle inequalities. To respond, governments are designing policies to raise the quality and reduce the inequalities in their education systems to adapt and shape the future.

Mexico has been committed to reforming its education system in recent years, in order to provide better learning and, eventually, better life opportunities for all its students. Efforts undertaken have aimed to improve coverage and quality of its education system while changing the focus from inputs and numbers to student learning and schools as the centre. To understand how Mexico can move forward on this track, it is essential to reflect on the significant education reforms the country has undertaken over the past years.

In 2018, the Mexican government invited the OECD to assess the education reforms started in 2012-13, as part of the OECD Implementing Education Policies project (Box 1.1). This report presents the results of this assessment, focusing on basic education (composed of pre-school, primary and lower secondary education). The report: i) presents and analyses the main reforms Mexico has implemented in recent years; and ii) provides insights for future policy development on how these policy investments can reach schools and students to improve learning for all. These two aspects are discussed in light of evidence and what is considered international best practice. More concretely, the OECD analysis focused on the following items of Mexico's current reform agenda:

- **Quality and equity in education.** Mexico has made commendable efforts to establish quality and equity as a guiding principle in education policymaking, building consensus for the signature of a political Pact for Education and enshrining the concept of quality with equity in the law. Since 2013, the country notably invested to increase enrolment rates in early childhood education and care (ECEC) and upper secondary education, to support the most disadvantaged students financially and with adequate instructional approaches, and to enhance educational infrastructure.
- **New curriculum.** Mexico introduced a new curriculum for compulsory education (from pre-school to upper secondary education) focused on ensuring that all students develop the knowledge, attitudes and skills required in the 21st century, including in socioemotional skills, also introducing some curricular autonomy for schools. The implementation process for the curriculum reform started in a sequenced manner in schools from August 2018.
- **Support for teachers and schools.** Several mechanisms have been designed to strengthen schools in delivering education and to support a teaching career that also relies on an external evaluation system for teachers. In particular, both the strategy *La Escuela al Centro* and the Teacher Professional Service (*Servicio Profesional Docente*), including the school improvement support services (*Servicio de Asistencia Técnica a la Escuela*, SATE) can be perceived as two fundamental structures that aim at transforming schools' structures while providing the tools for teachers to identify their needs and progress in their careers.
- **Evaluation and assessment for system improvement.** Mexico has made significant progress in the creation and operation of a comprehensive national

system for education evaluation led by the National Institute for Education Evaluation (INEE) as an autonomous body. It is acknowledged that this evaluation system was created with the intention of supporting quality and equity in education as mandated by the Mexican constitution and supporting legislation. The evaluation and assessment tools administered by the INEE should be seen as a valuable input to support the SATE and teachers' pedagogical practice in the classroom and improve learning for students.

This report is part of the OECD's education policy implementation support activities, undertaken by an OECD international team (Annex A). Using OECD methodology (Box 1.1), this report is part of the OECD's efforts to strengthen the capacity for education reform across OECD member countries, partner countries and selected non-member countries and economies. It draws on qualitative and quantitative comparative data from benchmarking education performers collected by the OECD, research and desk-based analysis of key aspects of education policy in Mexico, a study visit to Mexico (18-24 June 2018, Annex B), additional meetings with a range of key stakeholders and regular exchanges with the national co-ordinator team.

**Box 1.1. OECD Implementing Education Policies support project**

As education has become a greater priority in strengthening knowledge economies, governments have developed a significant number of policies to improve the equity and quality of their education systems. Yet policy reforms do not always translate into concrete actions and visible results in schools, however well designed they may be. Failure to produce the desired policy outcomes may come from the gap between the keen attention given to the policy while it is being designed and the lack of attention when it comes to implementing it, as well as resistance against the reforms or lack of capacity to put them in place, among other reasons. Not implementing proposed education policies may result in expectations for education improvement failing to live up to the reality, not to mention erosion of trust in governments and wasted public resources.

OECD education policy implementation support activities can cover a wide range of topics and sub-sectors tailored to the needs of the country. Countries can opt for a range of support activities, including: i) an initial policy assessment of the reform or reforms; ii) stakeholder engagement seminars; and iii) strategic advice on reform strategies. The methodology aims to provide tailored analysis for effective policy design and implementation. It focuses on supporting specific reforms by tailoring comparative analysis and recommendations to the specific country context and by engaging and developing the capacity of key stakeholders throughout the process.

The policy assessment includes one or more visits to the county by an OECD team with specific expertise on the policy reforms, often with one or more international and/or local experts. The assessment process typically takes from six months to a year, depending on its scope, and consists of six phases: i) definition of the scope; ii) desk review and preliminary visit to the country; iii) main visit by an OECD team; iv) drafting of the document; v) discussion of draft report with key stakeholders; and vi) launch of final report.

*Source*: (OECD, 2018[1]), *Implementing Education Policies*, http://www.oecd.org/education/implementing-policies (accessed on 12 October 2018).

OECD team members also made extensive use of statistical information and policy documents from other institutions and those from the Mexican government, referenced throughout the text as data provided by the Mexican authorities.

This introductory chapter presents an overview of key aspects of the economic and social context shaping education in Mexico; and discusses the main features of the Mexican education system. It follows with a brief overview of the recent education reforms implemented in Mexico since 2013. The chapter finishes with a section offering a brief assessment that lay out the four policy issues that are discussed in the rest of the report.

## The Mexican context shaping education

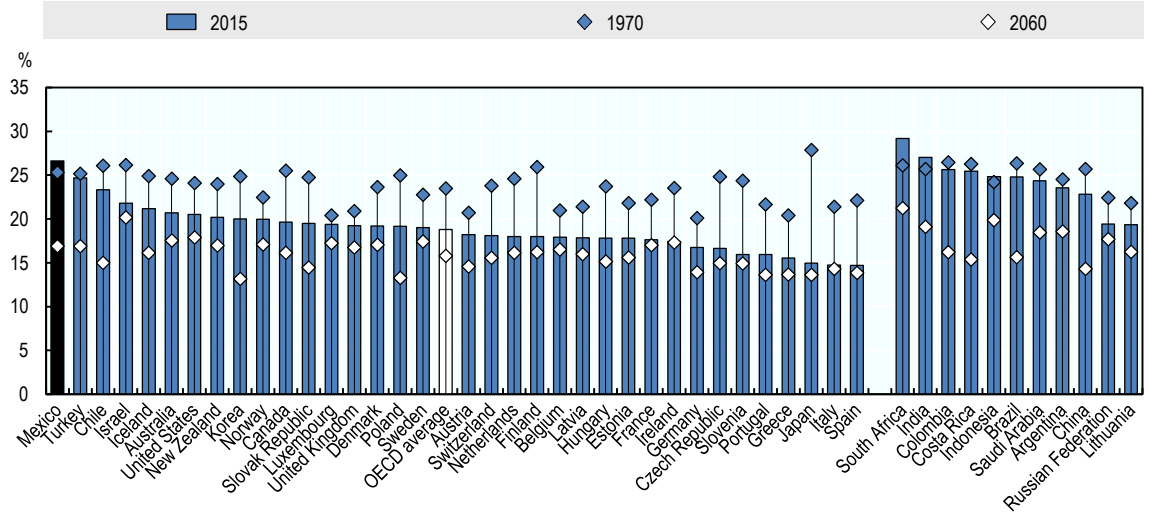
Designing, implementing and reviewing education policy in Mexico requires understanding and responding to different contextual changes, the provision of substantial resources and strong collaboration. All these factors are needed to face demographic changes combined with considerable diversity in culture and geography, uneven economic transformation, labour market difficulties and persisting social inequalities.

### *A large, young and geographically dispersed population*

With almost 124 million inhabitants, Mexico ranks 10th in the world in terms of the size of its population (INEGI, 2017[2]; The World Bank, 2017[3]), about a third of which (27%) are between 15 and 29 years old (INEE, 2018[4]). With such a high share of young population (one of the highest in the OECD, as shown in Figure 1.1), education issues are of prime importance for the country's development.

**Figure 1.1. Share of youth as part of the population in Mexico, 2015**

Number of young people (aged 15-29) in total population, in 1970, 2015 and 2060 (projection)




*Source*: OECD (2016[5]), *Society at a Glance 2016: OECD Social Indicators*, http://dx.doi.org/10.1787/9789264261488-en.

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Population dispersion is also a substantial challenge for education provision: 79% of Mexicans live in urban areas, mostly in Mexico City (over 12 million people) or other cities with over 1 million inhabitants (World Population Review, 2018[6]). Still, the remaining 21% of the Mexican population lives dispersed in remote and small communities of no more than 2 500 inhabitants (INEGI, 2017[2]; The World Bank, 2017[7]). This imposes significant challenges for the provision of adequate infrastructure and services, not only education. At the same time, the different subnational authorities (state governments) in charge of implementing education policy at the school level have different resources and capacities to undertake their actions. As a result of these asymmetries, the educational services received by the population may vary across the national territory.

### *Economic transformation and social inequalities*

In recent decades, Mexico has undergone a profound economic transformation. Since the 1980s, Mexico's economy has evolved from an import substitution to an export-oriented economic model. In the space of only a few years, Mexico has become a global leader in the export activities of major industries (such as auto parts, engines, electronic and medical equipment, and televisions) and one of the major recipients in the Latin American region of foreign direct investment, due to structural reforms that have made the Mexican economy more open and attractive. However, many Mexicans do not fully benefit from this economic transformation. Many Mexican industries still focus on low value-added activities with low productivity levels even if integrated into a global value chain. Furthermore, many Mexicans still lack good quality basic services in education, health and housing. There is a large proportion of people working in the informal economy where employment conditions are more precarious. Within this context, women, indigenous populations and youth are especially vulnerable to poor working and living conditions (OECD, 2017[8]).

#### *Persistent and high inequalities*

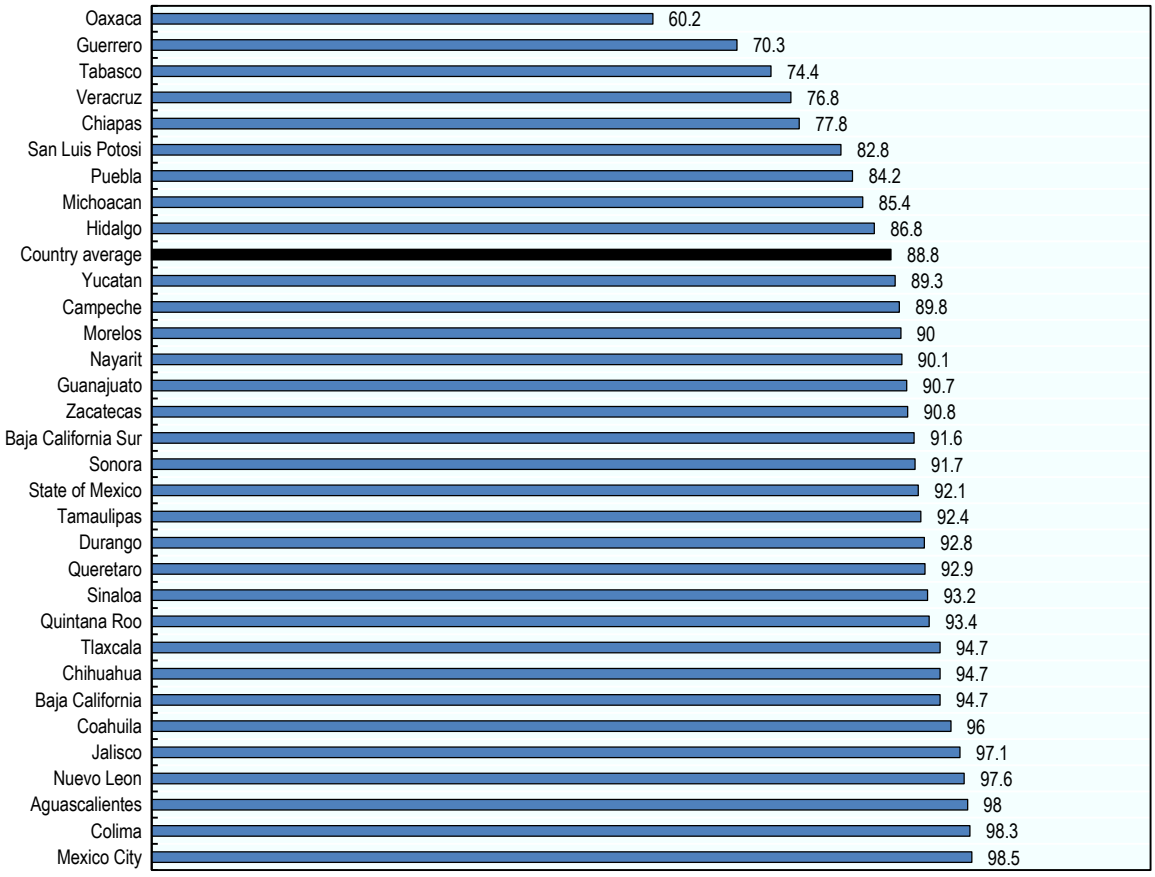
Income inequality persists across the country and is high relative to other OECD countries, with the richest 10% earning 20 times as much as the poorest 10%, compared to an average ratio of 8 across the OECD (OECD, 2017[9]). The OECD Economic Survey of Mexico points that inequality, as measured by the Gini coefficient, is high and has not declined (OECD, 2017[9]). Tackling this issue continues to be a priority for the country, which already has high social spending as a share of total public expenditure, but remains at the low end among OECD countries in terms of its share of gross domestic product (GDP) (OECD, 2017[9]).

Poverty rates differ markedly across states. The share of people living on less than 50% of the median income ranges from 6.8% in Nuevo León to 50% in Chiapas. A broader measure of poverty that considers non-income dimensions of well-being confirms these regional differences. While multidimensional poverty decreased in 25 out of 31 Mexican states and Mexico City between 2012 and 2016, it increased further in states that already had the highest prevalence of poverty. Still, Mexico is one of the few OECD countries to have experienced a decline in income inequality during the 1990s until the mid-2000s, although the level of inequality has since stagnated and remains one of the highest in the OECD (OECD, 2017[10]). At the same time, other forms of inequality also persist between different regions and states. As shown in Figure 1.2, there is a large dispersion in the household's access to basic services in Mexico. For example, in Oaxaca, only about 60%

of the households have access to basic services (water supply, sewer system and electricity) while, in Mexico City, such access is almost universal (98.5%).

Mexico's health system has improved in general terms and some performance indicators in the sector have improved. Nevertheless, for many Mexican families, this improvement fails to translate into better health. Some indicators that remain a cause of concern are obesity and diabetes, and high private payments and administrative costs suggest ongoing inefficiencies and unequal access to health services for the population (OECD, 2017[9]).

**Figure 1.2. Percentage of households with access to basic services in Mexico, 2016**




*Note*: This indicator corresponds to the percentage of households with adequate water supply, sewer system and electricity. Data generated based on the methodology developed and proposed by the OECD.
*Source*: INEGI (2016[11]) *Módulo de Condiciones Socioeconómicas; Encuesta Nacional de Ingresos y Gastos de los Hogares*, Instituto Nacional de Estadistica y Geografica, Mexico City.

StatLink http://dx.doi.org/10.1787/888933921947

Informality in Mexico affects the majority of the working population. According to the National Institute of Statistics and Geography (INEGI), informality affects 57.2% of the employed population in 2017 (INEGI, 2018[12]). Although this has improved from 60% at the end of 2009, the rate remains high. People in informal jobs are more exposed to precarious working conditions, have less training and do not have health and pension coverage (OECD, 2017[8]).

It is in this context of uneven economic performance across regions and economic sectors, and considerable social and labour market disparities, that the education system has a role to play. With almost half of the Mexican population being young, a high-quality education system for all Mexican children can contribute to reducing inequalities and better prepare them for their future and the future of the country.

## Main features of the Mexican education system

Mexico has a large and complex education system that caters for the needs of a diverse population. This section presents an overview of a range of features that represent the Mexican education system, such as the diversity of its student body, the governance and funding, the operation and management of schools and the teaching force, as well as evaluation and assessment practices underpinning the system. It concludes with a general picture of students' outcomes (including equity and inclusiveness) in the system.

### *A large and complex system*

Mirroring its population size, Mexico has one of the largest and most complex education systems in the OECD, with almost 31 million students enrolled in public and private institutions at compulsory education level in 2016 (Table 1.1). Basic education alone accounted for close to 26 million students, 1.2 million teachers and more than 225 000 institutions. Around 5 million students more were also enrolled at upper secondary level in 2016/17.

Student progress through the education system is organised in 3 main levels: i) basic education includes pre-school education (3 years; 3-5 year-olds); primary education (6 years; 6-11 year-olds) and lower secondary education (3 years; 12 to 14-15 year-olds); ii) upper secondary (with options between general or more vocational programmes for 15-18 year-olds); and iii) tertiary education. School attendance is compulsory for 14 years from pre-primary to upper secondary education (compulsory since 2012) (Santiago et al., 2012[13]).

The national education system caters to the educational needs of a large and highly diverse population. 21% of the population live in rural areas and more than half of the schools have at least 1 multigrade (*multigrado*) class (50% of primary schools in 2015/16) which means that teachers cater to students at different levels of primary education in the same class (INEE, 2018[4]). Furthermore, the system needs to cater to the cultural richness of more than 800 000 students in indigenous education who speak 68 languages different from Spanish and a total of 1.2 million indigenous or migrant students (SEP, 2018[14]).

To cater to the different needs, pre-primary and primary education segments are provided in three different types of school modalities: general, communitarian and indigenous. General schools are more typical of urban and rural zones and enrol the vast majority of students in these education levels (see Table 1.1). More than 21 000 indigenous schools are characterised by bilingualism/biculturalism: a school where at least one indigenous language is taught and elements of indigenous culture are immersed in the school's activities. They are not necessarily attended in majority by students with an indigenous background. Community courses are targeted at small communities and are run by the National Council for Education Development (*Consejo Nacional de Fomento Educativo*, CONAFE), which implements programmes to promote education among populations in rural and urban highly deprived contexts to guarantee that children and young people

receive an education of quality in communities (Santiago et al., 2012[13]). There are special textbooks published in many indigenous languages and specialised training for teachers.

Lower secondary education is provided in three distinct modalities, each typically associated with a school type: general, technical and televised (*telesecundaria* – tele-secondary). These major modalities might also contain other subcategories such as communitarian and those aimed at workers. At the same time, lower secondary schools can be either public or private. At this level of education, general schools cater for about half of the student enrolment while about 28% of students attend a technical school (a school which, in addition to general education, offers a range of "technical" subjects such as information and communications technology [ICT] or electronics and which gives access to any type of upper secondary education) (Santiago et al., 2012[13]).

**Table 1.1. Key data on basic and upper secondary compulsory education in Mexico, 2016/17**

Number of students, teachers and schools in Mexico

| Level | Students | | | Teachers | Schools |
|---|---|---|---|---|---|
| | Total | Female | Male | | |
| **Total compulsory education system** | **30 909 211** | **15 285 480** | **15 623 731** | **1 634 936** | **246 475** |
| *Basic education* | *25 780 693* | *12 700 104* | *13 080 589* | *1 217 191* | *225 757* |
| Public | 23 172 402 | 11 413 943 | 11 758 459 | 1 049 073 | 196 960 |
| Private | 2 608 291 | 1 286 161 | 1 322 130 | 168 118 | 28 797 |
| *Pre-school* | *4 931 986* | *2 443 997* | *2 487 989* | *234 635* | *88 939* |
| General | 4 343 899 | 2 152 159 | 2 191 740 | 196 121 | 60 864 |
| Indigenous | 423 344 | 210 264 | 213 080 | 19 031 | 9 838 |
| Community courses | 164 743 | 81 574 | 83 169 | 19 483 | 18 237 |
| Public | 4 226 934 | 2 097 378 | 2 129 556 | 190 680 | 74 332 |
| Private | 705 052 | 346 619 | 358 433 | 43 955 | 14 607 |
| *Primary* | *14 137 862* | *6 938 358* | *7 199 504* | *573 284* | *97 553* |
| General | 13 220 695 | 6 488 298 | 6 732 397 | 524 483 | 77 090 |
| Indigenous | 808 046 | 396 930 | 411 116 | 37 030 | 10 195 |
| Community courses | 109 121 | 53 130 | 55 991 | 11 771 | 10 268 |
| Public | 12 824 766 | 6 294 632 | 6 530 134 | 511 758 | 88 526 |
| Private | 1 313 096 | 643 726 | 669 370 | 61 526 | 9 027 |
| *Lower secondary* | *6 710 845* | *3 317 749* | *3 393 096* | *409 272* | *39 265* |
| General | 3 457 629 | 1 719 290 | 1 738 339 | 235 242 | 15 849 |
| Tele-secondary | 1 432 422 | 693 406 | 739 016 | 72 995 | 18,705 |
| Technical | 1 820 794 | 905 053 | 915 741 | 101 035 | 4 711 |
| Public | 6 120 702 | 3 021 933 | 3 098 769 | 346 635 | 34 102 |
| Private | 590 143 | 295 816 | 294 327 | 62 637 | 5 163 |
| *Upper secondary* | *5 128 518* | *2 585 376* | *2 543 142* | *417 745* | *20 718* |
| General | 3 202 514 | 1 654 041 | 1 548 473 | 223 171 | 16 107 |
| Technological | 1 551 731 | 757 051 | 794 680 | 149 430 | 3 381 |
| Vocational | 307 883 | 135 380 | 172 503 | 35 412 | 530 |
| Vocational technical | 66 390 | 38 904 | 27 486 | 9 732 | 700 |
| Public | 4 165 665 | 2 085 797 | 2 079 868 | 305 828 | 13 893 |
| Private | 962 853 | 499 579 | 463 274 | 111 917 | 6 825 |

*Source*: SEP (2017[15]), *Estadística e Indicadores Educativos Nacionales e Internacionales, 2016/17*, Secretaría de Educación Pública, Mexico City.

### *Education governance*

Mexico has a federal system composed of 32 federal entities (31 states and Mexico City), further divided into 2 457 municipalities. The separation of power between levels of government is complex. In general, states and municipalities are responsible for 50% of total public expenditure, in line with the OECD average of federal countries. The difference between taxing power and spending responsibilities is significant compared to the rest of the OECD, however. Mexico's subnational governments have a low share of resources from tax revenue, among the lowest of OECD countries (OECD, 2017[10]).

In education, responsibilities are shared between federal and state governments (e.g. for primary education) and between states and municipalities (e.g. for school buildings (OECD, 2016[16])), but the governance arrangements are not straightforward. A decentralisation process was initiated with the signature of the National Agreement for Modernising Basic and Normal Education *(Acuerdo Nacional para la Modernización de la Educación Básica*, ANMEB) in 1992 between federal and state authorities. It meant that the states took over the operation of basic education services previously conducted by the central government. The education services in Mexico City were not decentralised and are managed at the federal level, with its "minister" of education appointed by the federal Minister of Education (OECD, 2010[17]).

The decentralisation of education services has not, however, been fully consolidated. While formally the different functions are clearly defined, in practice federal and state-level institutions sometimes overlap or interact in uncoordinated ways.

Overall, the federal government establishes norms and regulations and delivers programmes to the states for them to operate. States are in charge of operating basic education services within their territories at the pre-primary, primary and secondary levels, as well as initial teacher education (teachers' colleges), except for the system of basic education in Mexico City (*Ciudad de México*) which is operated through a unit of the SEP with autonomy in management and pedagogy.

At the national level, the Secretariat of Public Education (*Secretaría de Educación Pública*, SEP) is the main authority in education. It is currently organised into four main under-secretariats: Basic Education (*Educación Básica,* SEB), Upper Secondary Education (*Educación Media Superior,* SEMS), Higher Education (*Educación Superior,* SES) and Planning, Evaluation and Co-ordination (*Planeación, Evaluación y Coordinación,* SPEC).

In addition to the SEP, a range of actors of diverse nature play an important role in education at the national level including:

- The National Institute for Education Evaluation (*Instituto Nacional para la Evaluación de la Educación*, INEE), an autonomous body which has the main responsibility for evaluating the education system.
- The National Council of Educational Authorities (*Consejo Nacional de Autoridades Educativas*, CONAEDU), composed of the federal government, representatives of the educational authorities at the state level and chaired by the Federal Secretary of Education. Its role is mainly advisory but it can take the lead to co-ordinate some policies across states.
- The National Union of Education Workers (*Sindicato Nacional de Trabajadores de la Educación*, SNTE), the largest teacher union in Mexico (and one of the largest in Latin America).

- The National Council for Social Participation in Education (CONAPASE) was created to promote stakeholder engagement of educational community representatives and collaboration with educational authorities to improve basic education in schools. Stakeholders include parents and their representatives, teachers and their representatives, leaders, students or other interested community members in contributing to the improvement of schools. The National Council reflects and supports School Councils for Social Participation which have been created across the country (SEP[18]).

At the state level, each of the 32 federal entities has the attribute to operate their education system. Most Mexican states have an Education Ministry or Department (*Secretaría de Educación Estatal)* or decentralised institutes to manage their education systems. State educational authorities take responsibility for the operation of basic (including indigenous) and special schools, run teachers colleges (*normales,* normal schools) where most initial teacher education takes place, provide professional development for basic education teachers and authorise private providers of basic education to operate (OECD, 2010[17]).

States are given full responsibility for the quality of basic education, the appointment and dismissal of teachers and the relations to the school community and the general public. With the education reforms, schools have the faculty of deciding, based on the curricular autonomy component, on how to address students' needs and interests, according to the guidelines issued by the SEP. They can also develop evaluation activities to complement those organised by the SEP.

Some observers have suggested that there are not always straightforward relations between central and state authorities, and this affects the development of education policy. There is evidence that when state governments are from different political parties in the national government or when the trade union is powerful enough to resist, this affects the take-up of policies (Barba, 2010[19]; Ornelas, 2008[20]; Scott et al., 2018[21]). In addition, it has been suggested that the decentralisation agenda has not been fully implemented for a range of reasons. But state governments may not have the capacities to handle the challenge or the research base needed at the state and teacher levels. Many policies and funding still remain at the national level, as programme funding and infrastructure are nationally allocated. States have low levels of financial resources and this together with other factors, can lead to states having limited capacity to develop and implement education policy (Scott et al., 2018[21]).

In addition to government authorities, there are many stakeholders at the heart of governance of education systems. A range of actors, including students, parents, teachers, employers and trade unions, have stakes in educational outcomes, and often policies and reforms need to engage them and address their legitimate concerns (Viennet and Pont, 2017[22]).

In Mexico, the main teacher union, the National Trade Union of Education Workers (*Sindicato Nacional de Trabajadores de la Educación*, SNTE) has played a key role in education policy for many years. Because all basic school teachers are required to affiliate by law (Presidential Decree of 15 March 1944), it is one of the biggest teacher unions in the world. It includes teachers, school leaders, administrative personnel and other educational workers such as supervisors, staff from initial teacher education institutions or from SEP.

Within the corporatist system operating in Mexico for decades, the SNTE has historically been actively involved in the operation of the education system beyond the more conventional industrial labour relations role played by teacher unions in other OECD countries. The union and the state were embedded in a more corporatist relationship, jointly participating in the administration of the education system in areas such as staff recruitment of teachers and school leaders (through joint SEP-SNTE selection committees), supervision of schools, high participation of the union in the SEP, as well as in structures of power across the states (Santiago et al., 2012[13]). In 2013, with the agreement established in the Pact for Mexico in relation to education, the introduction of a professional teaching system (*Servicio Profesional Docente*, SPD) and the arrest of the president of the union, the SNTE moved to adopt a more standard union role that other unions adopt internationally, bargaining for salaries and for labour conditions and focusing its role on providing training for teachers (Scott et al., 2018[21]).

Recently, representatives of civil society have gained importance, focused on raising awareness of the need to strengthen public education and providing important bridges between parents, society, education and schools. Non-governmental organisations such as *Mexicanos Primero, Suma para la Educación, Observatorio Ciudadano, Empresarios por la Educación Básica* and others have become more involved in the discussion and design of education policy. The example of the National Council of Social Participation in Education, (*Consejo Nacional de Participación Social en la Educación*, CONAPASE) is of special interest. The CONAPASE has had 8 national sessions (until July 2018) since 2016 and has a formal and legal structure for consultation (with many of the actors in the system) and operation (OECD, 2010[17]; Santiago et al., 2012[13]).

With this national environment, Mexican schools have had overall less autonomy than in other OECD countries, especially at the primary level of education (OECD, 2018[23]): Mexican schools' leaders, teachers and governing boards have responsibilities in less than 50% of their tasks, which is much lower than the OECD average (over 70%).

### *Increases in education spending*

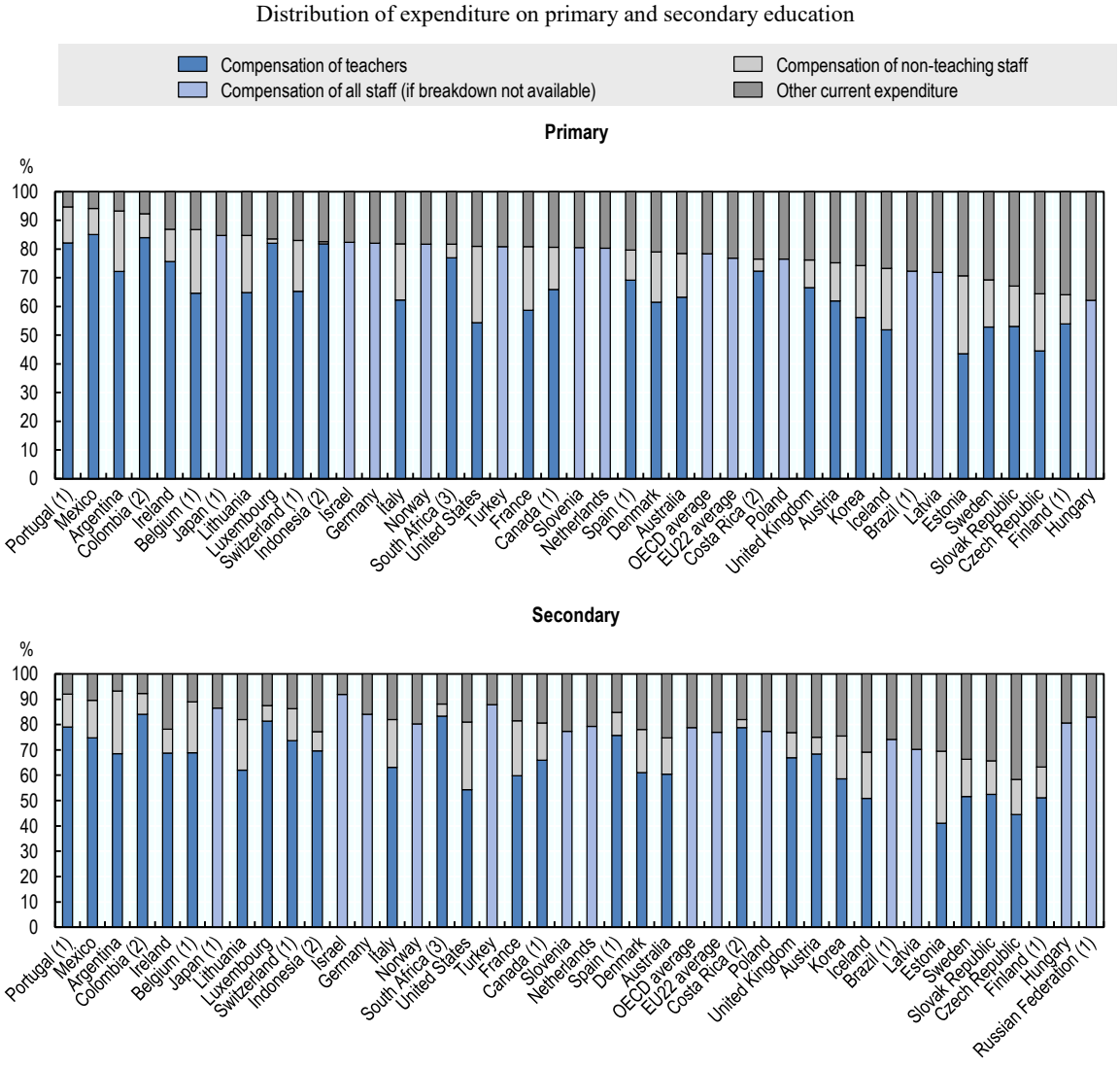
Mexico's education expenditures make up a relatively higher share of the country's GDP than the OECD average (5.4% in 2014 against an average of 5.2%). A larger-than-OECD-average portion comes from private sources (20.6% compared to 15.4%), although the share of public spending is increasing faster in Mexico. Between 2008 and 2014, Mexico had the biggest increase in public spending in the OECD of 11.9%, while private expenditure increased at the same rate as the OECD average (13%) (OECD, 2018[23]).

Annual expenditure per student by educational institution in 2014 was USD 2 896 at the primary level, 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 3 times the expenditure in primary education 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 upper secondary 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 (OECD, 2018[23]). Similarly to other countries, over 90% of the spending is allocated to recurrent costs, most of which are made up of salaries (Figure 1.3). Expenditure on infrastructure and other non-current expenditure is therefore less than 10%.

**Figure 1.3. Composition of current expenditure in public educational institutions, 2014**




1. Some levels of education are included with others.
2. Year of reference: 2015.
3. Year of reference: 2013.

*Source*: OECD/UIS/Eurostat (2017[24]), *Education at a Glance Database*, http://stats.oecd.org/ (accessed on 12 September 2018).

StatLink http://dx.doi.org/10.1787/888933560605

Federal spending on compulsory education (*Gasto Federal ejercido en Educación Obligatoria*, GFEO) makes up the most part of overall education spending (INEE, 2018[4]). It is allocated to the states through two main channels: the Federalised Spending Programmes (*Programas de Gasto Federalizado*, or *aportaciones*), earmarked to education; and budgetary participation (*participaciones*), which are transferred as part of the states' sovereign budget and can be used partly for education, depending on each state's decision. The third part of federal funds completes the overall budget for education through federal programmes (*programas federales*), which are directly administered by the central government. Still, each state can decide, each year, if they contribute additional resources to the federal expending on education for their individual systems but, in general terms, this is one of the main information gaps detected in the system because it is very difficult to identify the specific education expenditure from states other than transfers or programmes from the federal authority and then, in turn, how these resources are channelled to schools.

Both the Federal and the Federalized Spending Programmes finance current as well as capital expenditures. In basic education, the Federal Programmes come mostly in the form of compensatory and pro-equity measures, subsidies and provision of various goods and services to schools. The Federalized Spending Programmes support daily operations of education services with 90% of them allocated to financing the payroll of educational staff (*servicios personales)* in basic education (INEE, 2018[4]). In upper secondary education, the federal government finances some schools directly and entirely (including COLBACHs in Mexico City and various baccalaureate and study centres). It also provides indirect funding through subsidies for federalised schools (including, for instance, CECYTE and TELEBACH), which fall under states' responsibility. Overall, the allocation of resources can be uneven (INEE, 2018[4]).

One of the major challenges in terms of funding in the Mexican system is that there is no set scheme for school funding: some schools are financed by state-level authorities, while others receive funds directly from the federal government – including from the SEP, other secretariats or from federal agencies – in return for which they are put under federal supervision. As mentioned, states manage and disclose their budgets according to own practices, which makes it hard to have a detailed picture of how federal and state funding transits to schools (INEE, 2018[4]). Resources may also come to schools through programmes with specific goals and an attached budget. OECD and national evidence point out that programme-based funding was a source for inequity across schools and municipalities (OECD, 2018[23]).

### *The teaching workforce*

Given Mexico's complex education system, there is a large teaching workforce composed of teachers, school leaders, technical pedagogical advisors (ATPs) and supervisors (more than 1.2 million in basic education) working across the country. Teachers perceive themselves as a rather well-regarded profession (49%) in 2013 and benefit from nationally competitive statutory salaries (OECD, 2018[23]).

Still, teachers in Mexico face challenges and work in demanding environments, more demanding than the OECD average, with longer teaching hours as well as a higher teacher-to-student ratio (1 to 27 in Mexico compared to 1 to 15 on average) (OECD, 2018[23]). In 2016/17, 54% of primary schools in Mexico were of multiple years (*multigrado*), which means that teachers cater to students at different levels of primary education in the same class. Also, a higher share of teachers in Mexico in the

international TALIS comparative study in 2013 reported working in schools where 30% or more of the students are from a socio-economically disadvantaged background. 57% of teachers in primary education, 44% of teachers at the lower secondary level and 43% of teachers at the upper secondary level reported this in comparison to the TALIS average of 16%, 20% and 14% respectively (OECD, 2014[25]).

In terms of initial preparation, the majority of teachers in Mexico have received some initial teacher preparation. As in many other countries, teacher education in Mexico is organised by level: one for teachers in basic education (this includes pre-primary, primary and lower secondary schools) and one for teachers in upper secondary education. Most basic education teachers receive their initial preparation in teachers' colleges (*escuelas normales*), reaching around 500 across the country. Presently, students in *normales* spend about one-third of their education on general pedagogy, one-third on subject-specific training and one-third in school placements. This report does not cover initial teacher education but focuses its analysis on entry mechanisms and continuous professional development. Upcoming OECD reports covering higher education in Mexico will provide elements on initial teacher education.

Still, in 2013, Mexico had the lowest proportion of teachers who reported having completed a teacher education or training programme (62%) among countries participating in the OECD Teacher and Learning International Survey (TALIS). Many teachers in 2013 reported not feeling well-prepared for the challenges of their job. This may be because until around 2008, Mexico did not have a national licensing mechanism for teaching. Following the first national examination for beginning teachers implemented in 29 states (out of 31) and the Federal District, the results in the 2008/09 and 2009/10 cycles were discouraging: only around 30% of the teachers successfully passed the test (OECD, 2010[17]).

Prior to this, the process of selecting teachers was not very transparent across the country. Some states used licensing mechanisms, others allocated them through a teacher examination, while others allocated following the recommendations of mixed commissions (with participation from the State Education Authority and from the SNTE). In 19 states, no formal licensing strategy was applied, other than obtaining the graduate certificate from a *normal* or other teachers' initial education institution (Guevara and González, 2004[26]). In states with no formal licensing mechanisms, teacher posts were *de facto* given in agreement with and mainly controlled by the union. While the SNTE itself formally followed the internal rules stipulated in their norms (*estatutos)* to allocate posts (based mainly on factors such as length of time in the profession and teacher training), the mechanisms were not transparent and were sometimes perceived as unequal and highly politicised. Under the schemes in some states, teachers were able to "buy" their posts; some had the right to "sell" or "offer in heritage" their permanent posts to whomever they chose, including relatives (OECD, 2010[17]). The situation has largely evolved, with the introduction of a Professional Teaching Service in 2013 that has started assessment practices for new teachers entering into the profession, reviewed in Chapter 4.

In terms of school management, leaders also face complex school environments, leading multigrade or rural schools, having a lack of sufficient resources and low levels of autonomy to respond to their school needs. In Mexico, the school director is in charge of the functioning, organisation and management of the school. The school director's main tasks are to define goals, strategies and school operation policies; to analyse and solve pedagogical problems that may arise; and to review and approve the work plans

elaborated by teachers (OECD, 2010[17]), and now to work with the pedagogical councils and participate in the *Consejos de Participación Social* at the school level.

In the past, despite candidates having to meet a certain set of formal requirements to enter into the profession, it appeared that school leaders were often nominated by the SNTE or by a joint SEP-SNTE commission through non-transparent procedures and criteria (OECD, 2010[17]). This changed following the creation of a teaching career that includes selection mechanisms for new school leaders as well as appraisal processes for those in the post. The curricular reform has also given some autonomy to schools and their leaders to choose courses according to their local needs, as a particular way to contribute to the improvement of the quality of compulsory education by promoting student´s learning. This action is also reinforced through the regulation and co-ordination of the Teacher Professional Service that ensures, based on the appraisal mechanisms, the abilities of the teachers and managers (through the National Co-ordination of the Teacher Professional Service, CNSPD).

### *Assessment and evaluation practices*

Evaluation responsibilities are shared by several actors. At the federal level, 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 in charge of developing and co-ordinating evaluation throughout the system. External monitoring of schools is undertaken at the subnational 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 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 the OECD Programme for International Student Assessment (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%). The introduction of Technical School Councils (*Consejos Técnicos Escolares*) and the implementation of the Improvement Route for schools (*Ruta de Mejora*) may change this, as it is based on continuous self-evaluation practices.

To evaluate and monitor the Mexican educational system, an important aspect of the Mexican reform of 2013 was the transformation of the INEE into an autonomous body within the Mexican State and conferring it the co-ordination of the System of National Educational Evaluation (*Sistema Nacional de Evaluación Educativa*, SNEE) through Article 14 of the INEE Law. This was done to guarantee the provision of quality educational services (Article 3, Fraction IX of the Political Constitution of the United States of Mexico, *Constitución Política de los Estados Unidos Mexicanos*). Just after the education reform was enacted, the INEE took initiatives to establish the formal organisation of the SNEE. The conceptual framework of the National Policy on Educational Evaluation (*Política Nacional de Evaluación de la Educación*, PNEE) – was also prepared, defining its activities and strategies. The PNEE has defined seven axes of action, with specific objectives that guide the different evaluation initiatives.

The INEE also supported the different States of the Mexican Republic in the construction of their specific documents known as State Programmes for Educational Evaluation and Improvement (*Programa Estatal de Evaluación y Mejora Educativa,* PEEME). In other words, the INEE built in a short period of time all the legal architecture of the SNEE,

including those in at subnational level in collaboration with the corresponding authorities. Other important components of the evaluation system in Mexico, such as teacher appraisals or PLANEA (for students), are discussed in this report when dealing with the reform package in education starting in 2012-13.

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 (OECD, 2014[25]). In 2013, Mexico introduced a comprehensive teacher appraisal system, covering completion of probation and regular appraisal of teacher performance as well as school leaders' appraisal. Evaluations of promotions and reward and incentive schemes focused on school improvement. The INEE became responsible for 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, connecting the appraisal to teachers' daily work and improving teacher professional development. Providing teachers with timely and evidence-informed feedback is important to strengthen the profession in Mexico, as demonstrated by a larger than average proportion of Mexican teachers who reported that the feedback they received has improved their teaching practice (86.3%, compared to the TALIS average of 62%) (OECD, 2018[23]).

## *Student outcomes: Achieving quality with equity*

### *Attainment and completion of upper secondary education*

As Mexico prepares its students for the 21st century, attainment and completion rates up to upper secondary education should continue improving (OECD, 2017[8]).

In an attempt to raise educational attainment levels, Mexico made pre-primary education compulsory starting in 2008/09 and raised the compulsory school-leaving age to 17 years (to the completion of upper secondary education) in 2012. The duration of compulsory education is 14 years, longer than the OECD average (OECD, 2018[23]). In this effort made by Mexico to improve enrolment and completion rates, multigrade schools have played an important role, as shown in Table 1.2, as they represent an important proportion of both the total of schools and students at compulsory levels.

**Table 1.2. Student enrolment and completion in Mexico, 2016/17**

| Indicator | Number |
|---|---|
| Number of multigrade schools ECEC to EMS | 101 517 (54.4%) |
| Number of students in multigrade schools | 3 669 062 (19.2%) |
| Enrolment rate in ECEC (before 5 years old) (%) | 69.5 |
| Enrolment rate in primary education (%) | 105.4 |
| Enrolment rate in lower secondary (*secundaria*) (%) | 99.9 |
| Enrolment rate in upper secondary (EMS) (%) | 76.6 |
| Completion rate in lower secondary (*secundaria*) (%) | 85.5 |
| Completion rate in upper secondary (EMS) (%) | 66.7 |

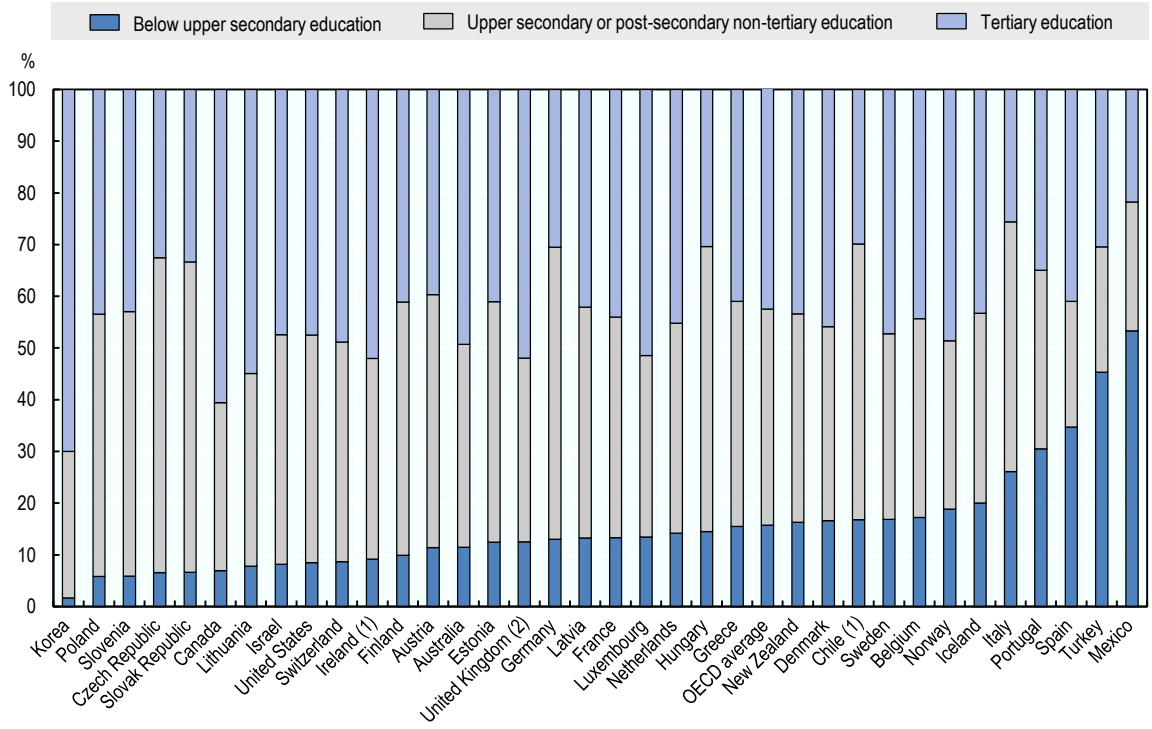
*Notes*: Multigrade schools are schools whose teachers cater to students from different years in the same class. ECEC stands for Early Childhood Education and Care and EMS stands for *Educación Media Superior* (upper secondary education).
*Source*: SEP (2017[15]), *Estadística e Indicadores Educativos Nacionales e Internacionales, 2016-17*, Secretaría de Educación Pública, Mexico City.

Among OECD countries, Mexico has the largest share of 25-34 year-olds whose highest educational attainment is below secondary education (Figure 1.4) but this masks considerable progress made in the country in recent years, as it has declined by 10 percentage points from 63% in 2000, increasing attainment in upper secondary and tertiary education. Mexico made upper secondary education compulsory in 2012, in order to attain universal coverage by 2022,and enrolment rates have increased (OECD, 2018[23]).

Holding a higher education degree makes a difference in the labour market in Mexico. The 22% of young Mexicans who held a tertiary degree in 2016 had a significant advantage in terms of pay over their counterparts with a lower or no degree. Tertiary degree holders earned a wage premium of 102% vs. 56% on average across OECD countries, and 7 out of 10 held a stable contract compared to 2 in 10 for those who did not complete compulsory education (OECD, 2018[23]). Nevertheless, and despite the increase in enrolment rates, the share of Mexican adults with upper secondary and tertiary education remains below the OECD average and upper secondary dropout rates are very high. This leaves the country with a comparatively low-skilled workforce (OECD, 2017[10]).

**Figure 1.4. Educational attainment of 25-34 year-olds, 2016**

Proportion of 25-34 year-olds per level of education




1. Year of reference differs from 2016. Refer to the source table for more details.
2. Data for upper secondary attainment include completion of a sufficient volume and standard of programmes that would be classified individually as completion of intermediate upper secondary programmes (16% of adults aged 25-64 are in this group).
*Source*: OECD (2017[27]), *Education at a Glance 2017: OECD Indicators*, http://dx.doi.org/10.1787/eag-2017-en.

StatLink http://dx.doi.org/10.1787/888933556957

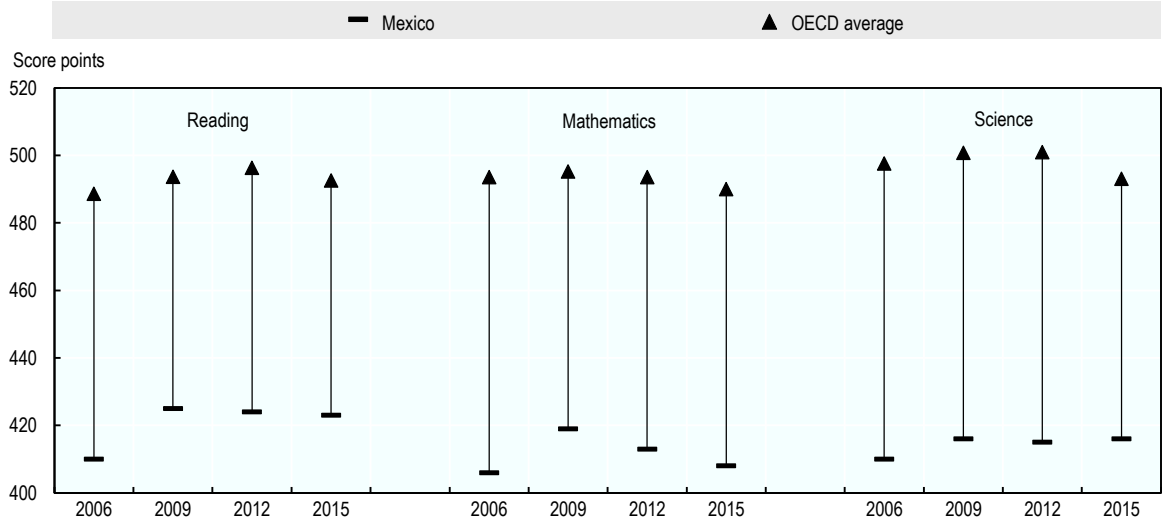
### *Student performance*

Mexico's 15-year-old student performance has shown improvement since it first participated in the Programme for International Student Assessment (PISA), although the country still lags behind other OECD members (OECD, 2018[28]; Avvisati, 2017[29]). At the same time, Mexico has increased enrolment rates and is one of the countries where the impact of socio-economic background on students' performance on PISA has been decreasing.

More concretely, the country has improved its performance in mathematics by 5.3 score points every 3 years since 2003, but it has stagnated in both science and reading over the same period (OECD, 2018[23]). However, this trend data needs to be interpreted with caution in light of the expansion of enrolment in secondary education over the past decades, which is reflected in PISA. Between 2003 and 2015, Mexico added more than 300 000 students to the total population of 15-year-olds eligible to participate in PISA. This expansion in education opportunities, due to important public efforts to cater to equity and enrolments, make it more difficult to interpret the changes in mean scores in PISA over time. Typically, as populations that had previously been excluded gain access to higher levels of schooling, a larger proportion of potentially low-performing students will be included in PISA samples. This may be reflected in the changing scores across the years (OECD, 2018[28]).

The trends also show that the share of students performing below Level 2 in PISA, which represents the minimum level considered to function in today's societies, has decreased by 7 score points on average since PISA 2006. At 48%, it was still the highest share among OECD countries in 2015. Inversely, the share of high-performing students (above Level 5) was the lowest in the OECD group (OECD, 2018[23]).

**Figure 1.5. Trends in PISA performance in Mexico, 2006-15**




*Source*: OECD (2016[30]), *PISA 2015 Results (Volume I): Excellence and Equity in Education*, http://dx.doi.org/10.1787/9789264266490-en.

StatLink http://dx.doi.org/10.1787/888933921966

Looking at national student learning assessments, the latest results of the National Programme for Learning Assessment (PLANEA), which is a standardised student assessment that measures the learning progress amongst Mexican students in the subjects of language and communication and mathematics, offer some worrying results. At the national level, 40% have only a basic mastery of language and communications (Level II) while 33.8% have an insufficient level (Level I). The pattern is similar for mathematics scores, although with an even higher share of low performers (64.5% at Level I at the national level). A worrying factor for public education is that in both language and mathematics, the bulk of higher performers (Levels III and IV) are found in private schools, with only 18.4% of students in general public education displaying a satisfactory level in language (SEP, 2018[31]). So Mexico's education is still characterised by contrast and polarisation.

### *Equity and inclusiveness*

Fostering better and more equitable educational outcomes (i.e. outcomes that are not associated with students' socio-economic background) is crucial to building a productive, fair and cohesive society in Mexico in the future. Mexico has made considerable policy efforts to make its education system more equitable and inclusive. The constitutional reform of 2013 made quality education a right for all Mexicans. The efforts continued with the Programme for Inclusion and Educational Equity (*Programa para la Inclusión y la Equidad Educativa,* 2014) directed at indigenous and special need students, and the expansion of PROSPERA for more disadvantaged families to benefit from cash transfers by sending their children to schools. The federal programmes *Escuelas de Calidad* and the *Programa de Reforma Educativa* have included schools in rural, indigenous and marginalised areas a funding priority as well.

However, the Mexican system lacks stronger social inclusiveness: students are more likely than in other OECD countries to attend a school where their peers have a similar socio-economic background. Results from PISA 2015 show that the country's variation in students' performance is rooted in the differences between schools. More specifically, results on PLANEA show that students of indigenous parents score consistently lower than non-indigenous students. The point difference doubles when the students are in community education rather than in general public education (PLANEA 2017).

Results in PLANEA 2017 also unmask the regional disparities. For the Spanish language test at the lower secondary level, the difference between the best-performing state (Coahuila, with 515 points) and the lowest (Tabasco, with 457 points) in terms of the average score was 58 points (the national average score was 495 points). These scores may change substantially from one year to the next, however (SEP, 2018[32]).

## Recent education policy reforms

In 2013, Mexico launched a comprehensive reform package of its education system aimed to improve quality for all Mexican students. The reforms stemmed from an agreement reached by the main political forces on their vision for the country. The objective was to guarantee continuity of reforms in key domains of public policy (*Pacto por México*, 2 December 2012), including fiscal, financial, electoral and education sectors (OECD, 2017[9]). In education, the pact aimed to place education as a high priority in the national agenda, aiming to improve the quality of basic education, to increase enrolment and improve the quality of upper secondary education, and to rebalance the role of the Mexican state in the national education system.

The constitutional reform at the beginning of 2013 and subsequent legislation have addressed an impressive number of issues. First, quality education (*educación de calidad*) became a constitutional right for all Mexicans (Article 3 of the Political Constitution of Mexico, modified by decree DOF 26-02-2013). Furthermore, equity was established as a core component of the quality of education by Article 8 of the General Law of Education (*Ley General de la Educación,* LGE, modified by decree DOF 11-09-2013).

Following the constitutional reform, one of the first laws passed in September 2013 created a Professional Teacher Service (*Servicio Profesional Docente,* SPD) based on merit for teachers, principals, pedagogical support staff (*asesores técnico pedagógicos*) and supervisors. The SPD is based on competency-based profiles; and establishes mechanisms for entry, promotion, incentives and permanence for teachers and system leaders (*Ley del Servicio Profesional Docente*). At the same time, it established a new information and management system in education (*Sistema de Información y Gestión Educativa,* SIGED, 2015). It also defined a new school improvement support service called *Servicio Técnico de Asistencia a la Escuela* (SATE) that provides support in school management, pedagogical advice and is based on a new role for school advisors (ATPs) and supervisors.

Mexico also took a noteworthy step forward when it provided constitutional autonomy and new attributions to the National Institute for Education Evaluation (*Instituto Nacional para la Evaluación de la Educación,* INEE). The central rationale of this reform was to emphasise the role of evaluation as a tool to improve the quality and the equity in education policies, processes and outcomes. Another important objective was to ensure the independence of the institution with the responsibility to assess the state of education in the country. The main role of the INEE is thus to hold the entire education system and its actors accountable for their contribution to educational improvements (*Ley del INEE*).

As part of the reform package in subsequent years, there was a consultation process that generated a New Educational Model (*Nuevo Modelo Educativo*, NME). Its goal is to reorganise the education system and make it fit for its new mandate to provide quality education with equity and prepare all students for the 21st century. The NME includes mechanisms such as the Strategy for Equity and Inclusion in Education (*Estrategia de Equidad e Inclusión Educativa*), which aims to give coherence to the government's action for equity in education; and the School at the Centre strategy (*La Escuela al Centro*) which co-ordinates several mechanisms to reduce the administrative load on schools and to provide them with greater autonomy to foster their active participation as a key actor in educational change.

As part of the *Nuevo Modelo*, a curricular proposal was also published and went through consultation and discussion from 2014 to 2016. This resulted in new curricular reform, the Key Learnings for Integral Education (*Aprendizajes Clave para la Educación Integral*), published in its final version in 2017. The new curriculum aims to respond to learning needs for the 21st century, to adapt to Mexico's socio-economic and cultural context, and to align with the vision and the purpose the country set for its education (*Los fines de la educación*, discussed and published between 2014 and 2017).

One major challenge as the reforms progressed has been to balance attention and resources between all of them and to maintain their coherence so they contribute to enhancing quality with equity. However, there appears to be support for the overall reform strategy. A household survey from 2017 reported by the SEP asking the question whether the interviewed person agreed or disagreed with the education reform showed

that 64% were in agreement and 20% in disagreement, with 16% not responding to the question (BCG, 2017[33]).

Overall, the country has so far shown its willingness and capacity to bring necessary adjustments to its policies. For instance, after the reforms' legal cycle started with the two structural laws on the Teacher Professional Service and the INEE, the SEP took action to guarantee that the consultation on the New Educational Model and especially on the new curriculum started in 2014. Other examples of such adjustments include the revision of the teacher performance evaluation (*evaluación del desempeño docente*) by the INEE in 2015, which allowed for improvements of the process between 2014 and 2017, or the relocation of the General Direction for Continuous Training within the SEP.

These reforms have aimed to co-ordinate, leverage and complement existing initiatives with new measures to enhance education quality and equity for all students. Given the wide diversity of the country in economic, social, cultural and geographic terms, efforts have been and continue to be made to face an array of different challenges. In its recent reforms, Mexico acknowledges that its education system still needs support on basic areas, as demonstrated by the large amounts of resources invested in schools' infrastructure – through programmes such as *Escuelas al CIEN* (ECIEN) or in the government's efforts to increase enrolment rates and attainment until upper secondary education. At the same time, Mexico is also turned towards the future, for instance with a state-of-the-art curriculum for the 21st century, and with its strong willingness to collaborate better with schools and stakeholders to make education policies more responsive to students' learning needs.

## Looking towards the future

Mexico's education system is large and complex, and has made a large shift from coverage to also focusing on providing quality education for all. To continue on this path, it needs to cater to its large youth population, its indigenous and rural population, and ensure that all schools across the country are ready to respond.

In fact, from an education system that prioritised governance and vested interests, where there was lack of transparency in a number of areas, for example, teacher recruitment, Mexico has been undertaking important reforms that have achieved much progress in a relatively short amount of time:

- Placing quality with equity at the heart of the educational agenda and objectives of the education system, through its constitutional and legal reforms, and introducing a new equity programme that brings together a range of programmes coherently.
- Providing learning environments that are fit for the 21st century and respond to students' needs with the *Nuevo Modelo Educativo* and the curricular reform.
- Ensuring that schools are run and staffed with high-quality professionals that receive adequate support having a teacher career service (the *Servicio Profesional Docente*) that is clear and allows for a professional career and with the creation of a school improvement service (SATE).
- Introducing autonomy to the INEE and responsibility for co-ordinating the national evaluation system (SNEE) and designing evaluation and assessment frameworks such as PLANEA that support schools and policy makers to ensure effective student learning and enhance the quality of education for all.

- Building information and data management mechanisms such as the SIGED that should not only allow access to relevant information of the education system but also to serve as a basis for more precise management of the system.

The reforms need time to mature and flexibility to be adjusted as required to ensure they deliver quality education for all student learning. This requires a balance between policy design and implementation on the ground. On the one hand, this can be accomplished by continuing to:

- Prioritise equity with quality for all students.
- Implement the curriculum for 21st century learners.
- Support the professionalisation of teachers and schools.
- Ensure that evaluation and assessment are focused on improvement and balanced between formative and accountability purposes.

Yet, beyond good policy design, it is important to ensure that the policies reach schools and classrooms and have a direct positive impact on student learning as they are being implemented. For this to happen, there are a range of issues to consider:

- Policies will be effective and will have a more lasting positive impact if they are developed and implemented through inclusive stakeholder engagement that is adapted to governance structures.
- Clear strategies are needed to define the actors, timing, responsibilities and mechanisms to monitor policies and identify potential adjustments.
- The focus should be on student learning, making sure that all schools and teachers have the support and resources to implement properly.

In Mexico, like in many other countries, there is a considerable distance between national policymaking and the learning that happens in schools. The SEP has to cater to the individual needs of a large number of schools, students and teachers across the country through their national policymaking. This requires both substantial resources and support from subnational authorities. In other words, under the current governance system, no reform in education could be effectively implemented without getting the involvement and support of subnational authorities (state's governments) to reach schools.

Federal entities (states) and schools require strong capacity, with clear objectives and support to evolve and respond to the needs the system has in light of the recent policy reform package. The states and different stakeholders have an important role to play. In complex education systems such as the one in Mexico, "implementation" is not only about executing the policy but also about building and fine-tuning it collaboratively. With an important set of reforms, Mexico needs to make sure that those involved in education policy and practice do not suffer from reform fatigue, and that new waves of potential reforms are carefully assessed to protect progress already made, keep on track with good practices and adjust/correct those aspects that require improvement.

These issues need to be considered for Mexico to continue on its positive trend towards educational improvement. Progress made on this reform trajectory can be enhanced by focusing efforts on refining not only the design but also the implementation process itself.

Following this overview and analysis of the current situation and recent reforms adopted in Mexico, this report reviews and proposes a set of recommendations around the

four major dimensions of the education reform package initiated in Mexico during 2012-13 and mentioned before:

- Providing equity with quality in Mexican education.
- Providing 21st century learning to all students.
- Supporting teachers and schools.
- Focusing evaluation and assessment on schools and student learning.

Each specific topic is presented in a separate chapter, structured around the discussion of its characteristics, the extent to which this particular policy development is aligned with international good practices, and a final section reflecting on aspects for future policy development. A concluding chapter provides an overview of the assessment and recommendations with a set of reflections on future policy development and general considerations for implementation.

## References


Avvisati, F. (2017), "Does the quality of learning outcomes fall when education expands to include more disadvantaged students?", *PISA in Focus*, Vol. 75, https://doi.org/10.1787/06c8a756-en (accessed on 4 September 2018). [29]

Barba, B. (2010), "Entre maestros: Reforma de la formación docente en Aguascalientes: Un análisis de su implementación", *Revista Mexicana de Investigación Educativa*, Vol. 15/44, pp. 251–75. [19]

BCG (2017), *Encuesta en Vivienda*, reported to OECD in PowerPoint in June 2018. [33]

Guevara, M. and L. González (2004), *Atraer, formar y retener profesorado de calidad: Actividad de la OCDE, Reporte sobre la situación de México*, OECD, Paris. [26]

INEE (2018), *La Educación Obligatoria en México - Informe 2018*, National Institute for Education Evaluation, Mexico City, https://www.inee.edu.mx/portalweb/informe2018/04_informe/capitulo_05.html (accessed on 5 September 2018). [4]

INEGI (2018), *Datos de Empleo y Ocupación*, Encuesta Nacional de Ocupación y Empleo (ENOE), http://www.beta.inegi.org.mx/temas/empleo/ (accessed on 8 October 2018). [12]

INEGI (2017), *Anuario Estadístico y Geográfico de los Estados Unidos Mexicanos*, Instituto Nacional de Estadística y Geografía, Mexico City, http://www.inegi.org.mx (accessed on 10 September 2018). [2]

INEGI (2016), *Módulo de Condiciones Socioeconómicas. Encuesta Nacional de Ingresos y Gastos de los Hogares*, Instituto Nacional de Estadistica y Geografica, Mexico City. [11]

OECD (2018), *Education Policy Outlook: Mexico*, OECD Publishing, Paris, http://www.oecd.org/education/Education-Policy-Outlook-Country-Profile-Mexico-2018.pdf. [23]

OECD (2018), *Implementing Education Policies*, http://www.oecd.org/education/implementing-policies (accessed on 12 October 2018). [1]

OECD (2018), *Skills in Ibero-America*, https://www.segib.org/wp-content/uploads/Skills-in-Ibero-America-Insights-from-PISA-2015.pdf (accessed on 24 August 2018). [28]

OECD (2017), *Education at a Glance 2017: OECD Indicators*, OECD Publishing, Paris, http://dx.doi.org/10.1787/eag-2017-en. [27]

OECD (2017), *OECD Economic Surveys: Mexico 2017*, OECD Publishing, Paris, http://dx.doi.org/10.1787/eco_surveys-mex-2017-en. [9]

OECD (2017), *OECD Skills Strategy Diagnostic Report: Mexico*, OECD Skills Studies, OECD Publishing, Paris, https://doi.org/10.1787/9789264287679-en. [8]

OECD (2017), *Towards a Stronger and More Inclusive Mexico: An Assessment of Recent Policy Reforms*, http://www.oecd.org/mexico (accessed on 16 September 2018). [10]

OECD (2016), *PISA 2015 Results (Volume I): Excellence and Equity in Education*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264266490-en. [30]

OECD (2016), *Regional Policy Profile Mexico*, OECD, Paris, https://www.oecd.org/regional/regional-policy/profile-Mexico.pdf (accessed on 12 September 2018). [16]

OECD (2016), *Society at a Glance 2016: OECD Social Indicators*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264261488-en. [5]

OECD (2014), *TALIS 2013 Results: An International Perspective on Teaching and Learning*, TALIS, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264196261-en. [25]

OECD (2010), *Improving Schools: Strategies for Action in Mexico*, OECD Publishing, Paris, https://doi.org/10.1787/9789264087040-en. [17]

OECD/UIS/Eurostat (2017), *Education at a Glance Database*, http://stats.oecd.org/ (accessed on 12 September 2018). [24]

Ornelas, C. (2008), *Política, Poder y Pupitres: Crítica al Nuevo Federalismo Educativo*, Siglo Veintiuno Editores, Mexico City. [20]

Santiago, P. et al. (2012), *OECD Reviews of Evaluation and Assessment in Education: Mexico 2012*, OECD Reviews of Evaluation and Assessment in Education, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264172647-en. [13]

Scott, D. et al. (2018), *The Education System in Mexico*, University College London. [21]

SEP (2018), *Nota Sobre la Educación Indígena de la Dirección General de Educación Indígena*, Secretaría de Educación Pública, Mexico City. [14]

SEP (2018), *Planea Resultados 2017*, Secretaría de Educación Pública, Mexico City. [31]

SEP (2018), *PLANEA: Evolución de Resultados en los Estados*, Secretaria de Educación Publica, Mexico City. [32]

SEP (2017), *Estadística e Indicadores Educativos Nacionales e Internacionales, 2016-17*, Secretaría de Educación Pública, Mexico City. [15]

SEP (n.d.), *Los Consejos Escolares de Participación Social*, Secretaría de Educación Pública, Mexico City, https://www.conapase.sep.gob.mx/en/conapase/Que_Hacemos (accessed on 25 July 2018). [18]

The World Bank (2017), *Word Bank Data on Total Population*, The World Bank, https://data.worldbank.org/indicator/SP.POP.TOTL?locations=MX (accessed on 12 September 2018). [3]

The World Bank (2017), *World Bank Data Rural population (% of Total Population)*, The World Bank, https://data.worldbank.org/indicator/SP.RUR.TOTL.ZS?locations=MX (accessed on 12 September 2018). [7]

Viennet, R. and B. Pont (2017), "Education policy implementation: A literature review and proposed framework", *OECD Education Working Papers*, No. 162, OECD Publishing, Paris, https://dx.doi.org/10.1787/fc467a64-en. [22]

World Population Review (2018), *Mexico Population 2018*, World Population Review, http://worldpopulationreview.com/countries/mexico-population/ (accessed on 12 September 2018). [6]