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## Letter dated 2 May 2011 from the Permanent Representative of

 Mexico to the United Nations addressed to the President of the Economic and Social CouncilAttached herewith is the national report of Mexico on progress towards the achievement of the internationally agreed goals, including the Millennium Development Goals, for the annual ministerial review to be held during the highlevel segment of the 2011 substantive session of the Economic and Social Council (see annex).

I should be grateful if you would circulate the present letter and its annex as a document of the Council, under item 2 (b) of the provisional agenda.
(Signed) Claude Heller
Ambassador
Permanent Representative

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# Annex to the letter dated 2 May 2011, addressed to the President of the Economic and Social Council from the Permanent Representative of Mexico to the United Nations 

# National report of Mexico about the advances and challenges in education with regard to the Millennium Development Goals 

[Original: Spanish]

## Summary

The Government of Mexico is convinced of the importance of education as a fundamental tool for the development of both individuals and society. It is for this reason that Mexico has implemented a series of efforts aimed at strengthening the coverage of education at all levels. The last 10 years have seen actions implemented that seek to promote the well-being and all-round development of pupils through means of support that address the improvement of health and nutrition, and which take care of material needs in order to guarantee pupils’ access to, attendance at and successful completion of school. The Opportunities (Oportunidades) programme has been key in guaranteeing that the pupils of families experiencing extreme poverty have been able to attend school. A comprehensive reform of basic education has been carried out to strengthen the linkage between the study plans of different education levels. Mexico has achieved universal coverage in primary education, and the completion rate in primary education has been increased to 94.5 per cent. However, additional efforts are being made to guarantee that pupils in the country enrol at the right time for primary education and complete it in the expected time frame. Furthermore, the country is making efforts to strengthen school infrastructure through the modernization of schools and by building new ones. The Mexican education system has succeeded in overcoming the inequality of school attendance between men and women at all levels of education in the country. The Programme of Scholarships for Young Mothers and Pregnant Young Women (Programa de Becas de Apoyo a la Educación Básica de Madres Jóvenes y Jóvenes Embarazadas) has been implemented with the aim of reducing the drop-out rate of vulnerable women between the ages of 12 and 18 .

Mexico set itself additional targets to those set out in the Millennium Development Goals. In the field of education, Mexico has taken steps to make progress in achieving three additional targets: (a) universal preschool education; (b) universal lower secondary education coverage; and (c) improving the quality of education. The number of children aged 4 and 5 who attend school has increased substantially until presently reaching a coverage of 87.4 per cent. However, efforts still need to be redoubled to increase coverage among children aged 3. Mexico has succeeded in increasing coverage in lower secondary education ( 82.8 per cent), but needs to redouble its efforts to achieve the additional target that it set itself. With the aim of making progress in achieving greater educational quality, the country has implemented various programmes aimed at improving the selection and training of its teachers. At the same time, Mexico has implemented various national and international standardized tests with the aim of establishing to what extent its students are acquiring the knowledge and abilities with which the national education
system seeks to provide them. With the aim of strengthening a national consensus about the importance of the quality of education and consistent with democratic accountability, the results of these standardized tests have been broadly disseminated throughout the country. The results reveal significant challenges to improve the quality of education in the country and to this end, the authorities are using the data produced by these tests to strengthen the quality of teaching at the same time that they are developing public policies to address the socio-economic factors that undermine the achievement of their students.

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## I. Introduction: the importance of education for development

1. In the last 20 years, an international consensus has grown about the importance of education as a tool for the development of individuals and societies. Education brings with it benefits for the individual, since it contributes to improving health, strengthens social inclusion and offers a greater chance of entering the labour market. Together with the individual benefits of education, the investment in human capital also translates into socio-economic benefits for those countries that have sought to invest in this social policy. Education promotes economic development (Psacharopoulous, 1995 and World Bank, 1993); contributes to reducing poverty; is a tool that helps to temper social and gender inequality (Birdsall, Ross and Sabot, 1997; and Birdsall and Londoño, 1998); produces positive external outcomes to improve health and reduce crime (Psacharopoulous, 2004) and increases the capability for technological innovation that is becoming increasingly necessary in the context of globalization and the commercial integration of the twenty-first century (World Economic Forum, 2006). It is for this reason that during the Millennium Summit held at the United Nations Headquarters in September 2000, that the leaders of 189 member countries set as one of their eight commitments the goal of improving education policy (Goal 2). As a result, the target was set to ensure that all children had the opportunity to complete a full course of primary schooling.
2. In addition to the eight general goals established under the Millennium Development Goals, Mexico adopted additional commitments in accordance with the realities in the country and with its economic and institutional potential. In the case of education, the country committed itself to achieving three additional targets:
(a) Ensure that by 2015, all children aged 3 to 5 receive preschool education and complete it in the prescribed time frame (three years);
(b) Ensure that by 2015, all children aged 12 enter lower secondary education, that all children aged between 12 and 14 receive lower secondary education and that 90 per cent of them complete it in the prescribed time frame (three years);
(c) Ensure that a significant majority of pupils in primary and lower secondary education achieve satisfactory levels of learning in the subjects of language and mathematics, in accordance with the standards and tests set by an independent assessment body.

This report comprises a review of the progress and continuing challenges in achieving the commitments on education made in respect of the objectives set in the Millennium Development Goals.

## II. Progress and challenges in universal primary education coverage (target 3)

Goal 2<br>Achieving universal primary education

## Target 3

Ensure that by 2015, children everywhere are able to complete a full course of primary schooling

| Indicator | 1990 | 1995 | 2000 | 2005 | 2010 |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Net enrolment ratio in primary education (ages 6 to 11) $^{\mathrm{a}}$ | 95.6 | 95.8 | 98.6 | 101.0 | 102.6 |
| Percentage of school attendance of 6- to 11-year-olds $^{\mathrm{a}}$ | 89.4 | 91.8 | 94.2 | 96.4 | 96.31 |
| Gross enrolment ratio in primary education $^{\mathrm{a}}$ | 108.6 | 108.4 | 107.9 | 109.8 | 111.8 |
| Primary completion rate $^{\mathrm{a}}$ | 70.1 | 80.0 | 86.3 | 91.8 | 94.5 |
| Literacy rate of 15- to 24-year-olds $^{\mathrm{b}}$ | 95.3 | 95.8 | 96.5 | 97.6 | 98.4 |

a Secretariat of Public Education, based on the Basic Statistics of the National Education System; the CONAPO Population Projections (2005); Population and Housing Counts 1995 and 2005; and the General Censuses of Population and Housing 1990, 2000 and 2010 (INEGI).
${ }^{\text {b }}$ Secretariat of Public Education, with data from the National Institute for Adult Education (INEA).
3. Mexico has made significant advances with regard to the universality of primary education. During the 2009-2010 school cycle, the net enrolment ratio in primary education was 102.6 per cent. This indicator shows the proportion of pupils aged 6 to 11 who are in primary schooling. At the same time, the gross enrolment ratio at this level of education was 111.8 per cent. Both indicators exceed 100 per cent enrolment. As occurs in other countries, ratios greater than 100 are due to the fact that different sources of information are used in calculating them. In the case of Mexico, the registers of school enrolment of the Secretariat of Public Education (SEP), the number of children of school age reported in the Census of Population and Housing carried out by the National Institute of Statistics and Geography (INEGI), and the population projections of the National Population Council (CONAPO) are used. However, not all children in this age group are attending school. According to the figures of the 2010 census, Mexico has succeeded in getting 96.31 per cent of children aged 6 to 11 to attend school. If the trend of increasing school attendance continues at the present rate, then it is expected that by 2015, the attendance of 99 per cent of children aged 6 to 11 will have been achieved. The efforts to ensure that all children in this age range attend school must continue to be strengthened, something that is particularly relevant when considering that the majority of children who are out of school belong to the most vulnerable families and live in indigenous, rural and/or isolated communities, or who are in migration.
4. The advance in the universality of primary education is the result of the work of the Mexican authorities in various areas:

- Work is being carried out to improve the well-being and all-round development of pupils by means of programmes that look to improve various
factors, such as health, nutrition and support that guarantees the access to, attendance at and successful completion of school
- The Comprehensive Reform of Basic Education has been launched, which structures continuity between segments and the entire progression through of basic education. It also sets out plans for articulated studies
- Various programmes have been implemented to bolster the body of teaching staff through the professionalization of teachers, more rigorous mechanisms for their selection by means of competitive exams, and incentives that take into consideration the academic performance of the pupils
- A priority of the Government has been the improvement of school infrastructure. This has been achieved through the modernization of schools and by building more schools. This ensures a better educational environment for pupils

5. For this reason, indicators such as the completion rate show the effort that our country has made to keep pupils in the classrooms. The progress in this area is important. The completion rate in the 2000/2001 cycle was 86.3 per cent. Ten years later, this indicator had reached 94.5 per cent in the 2009/2010 cycle. The efforts in the field of education are also reflected in the fall in illiteracy, which has dropped from 9.5 per cent in 2000 to 7.7 per cent in 2010 . These are encouraging indicators regarding the progress that the country as a whole has made in increasing the coverage of primary education. However, it must be acknowledged that significant challenges and discrepancies exist that Mexico must address if it is to satisfactorily achieve this educational goal. The states of Chihuahua, Oaxaca, Chiapas and Guerrero have completion rates of less than 90 per cent and, together with 10 other entities in the country, are below the national average.
6. At the same time, illiteracy increases in entities with greater levels of marginalization. The contrast between the states with greater and lesser marginalization is important. Oaxaca (15.4 per cent), Guerrero (18.4 per cent) and Chiapas (18.9 per cent) have illiteracy levels that are more than eight times higher than those which are encountered in the entities with the lowest marginalization, such as Nuevo León (2.3 per cent), the Federal District ( 2.4 per cent) and Baja California (2.8 per cent).
7. The school drop-out rate is a problem that countries are trying to combat because of its negative impact on the development of human capital. The federal programme Opportunities should be highlighted among the tools favoured by the Mexican authorities to keep children in the classrooms. The programme provides economic support to families living in extreme poverty on the condition that their children attend school and undergo periodic medical check-ups. The aim of the programme is to facilitate the enrolment and continued, regular attendance of the children in question between the third year of primary education and the third year of lower secondary school. ${ }^{1}$
8. There are grounds for encouragement in this area, since the drop-out rate in primary education has fallen by 50 per cent in the last 10 years, from a rate of

[^1]1.9 per cent in 2000 to 0.95 per cent in 2010. However, as in other areas of education, significant differences exist below the national level. There are states with greater drop-out problems that separate them from the rest of the federal entities, such as Quintana Roo (1.6 per cent), Guerrero (1.8 per cent), Baja California ( 2 per cent), Chiapas ( 2 per cent) and Oaxaca ( 2.7 per cent).
9. Given Mexico’s commitment to universal primary education coverage, and taking into account that, together with the additional targets that the country set itself, there is the target of ensuring that all 12-year-olds enter lower secondary education, it must be noted that the authorities need to make a greater effort to ensure that not only all children aged 6 to 11 attend primary school, but also that they enrol in time, in accordance with their age, and that they complete their studies in the time frame of 6 years that is foreseen for this level of education. These children will be the young people who eventually will enter lower secondary education. However, grade failure and repetition, together with the aforementioned drop-out rate, are undermining this objective. Adequate progress is being made in these two areas - timely enrolment and timely entry into primary education - but it remains necessary to speed up the pace to achieve rates that are consistent with the country's goal of the universality of primary education.
10. In the $1999 / 2000$ school cycle, 89.9 per cent of the children who enrolled for primary education did so in time, while in the 2009/2010 cycle that percentage had increased to 95.3 per cent. However, if taking into account the figures concerning timely completion, the challenges remain significant. When considering the children that entered during the $2001 / 2002$ cycle and who should have completed their primary education in the 2008/2009 cycle, it can be seen that of every 1,000 children, 677 did so on time, while 183 did so one cycle later and 28 did so two cycles later. Furthermore, 112 of every 1,000 pupils did not complete their primary schooling, be it because they fell behind significantly - and who therefore remain in primary education - or because they did not complete their studies. If this tendency continues, then it will not be until 2018 that the generation that begins its primary schooling that year will eventually complete them in the time frame foreseen in the General Law on Education.

Completion on time or up to two cycles after the prescribed time frame for primary education (1998/1999-2008/2009)

|  | Completion per 1,000 pupils of school generation |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| Primary | Total completion | Timely completion | One cycle later | Two cycles later |
| $1998 / 1999-2005 / 2006$ | 870 | 620 | 210 | 41 |
| $1999 / 2000-2006 / 2007$ | 877 | 637 | 203 | 37 |
| $2000 / 2001-2007 / 2008$ | 891 | 662 | 196 | 33 |
| $2001 / 2002-2008 / 2009$ | 888 | 677 | 183 | 28 |

Source: National Institute for Education Assessment (INEE), calculations based on continuous statistics of the 911 format (start of the school cycle 1999/2000-2009/2010), SEP-DGPP (General Directorate of Planning and Programming).
11. Mexico has a significant percentage of indigenous population. In accordance with the figures of the 2010 census, 5.87 per cent of the children aged 0 to 14 in the country speak an indigenous language; that is, $1,549,365$ out of a total of $26,357,929$
children. Of these, 67.6 per cent speak Spanish, while 457,908 only speak their native indigenous language. The country has made significant efforts to ensure that these children have access to primary education. Many of them belong to families that work in agricultural activities that cause them to migrate between different federal entities throughout the year. In this respect, regarding both indigenous education and attending to children belonging to migrant families, the challenge of primary education coverage relates not only to the number of schools that they can attend, but also to the socio-economic conditions that hinder their participation in primary education. The Opportunities programme has sought to contribute to changing this situation by means of offering economic support to families living in extreme poverty on the condition that their children attend school and undergo periodic medical check-ups. The number of indigenous pupils and students that belong to migrant families who attend school has increased in the last 10 years. In the 2009/2010 school cycle, 840,683 indigenous pupils participated in primary education. In the case of pupils from migrant families, the number of pupils in primary education has increased substantially by more than 300 per cent, from 16,175 pupils in 2001 to 60,477 in the 2009/2010 school cycle.

## III. Advances and challenges in the promotion of gender equality and the autonomy of women in the field of education

## Goal 3 <br> Promoting gender equality and the empowerment of women

## Target 4

Eliminate the inequality of the sexes in primary and lower secondary education, preferably before 2005, and in all levels of education by the end of 2015
12. The education system has succeeded in significantly reducing the unevenness in school attendance between men and women at all levels of education in the country between 2000 and 2010. In the case of basic education (preschool, primary and lower secondary), there is no difference by gender in school enrolment.
13. The ratio of women to men in upper secondary education increased from 102 per cent in the 2000/2001 school cycle to 107 per cent in the 2008/2009 cycle, which shows an increase in the enrolment of women that is greater than the enrolment of men. A similar situation can be found in higher education, where the ratio of women to men changed from 96 per cent in the 2000/2001 education cycle to 101 per cent in the 2008/2009 cycle. The enrolment of women surpassed that of men from the 2004/2005 education cycle onwards.
14. Programmes such as the aforementioned Opportunities programme have been an important tool in ensuring equal access to education for women and men. This programme offers greater differentiated types of support to women from the start of lower secondary education. With each higher level of study, the scholarship amounts are greater due to the opportunity costs of not entering the labour market in order to remain at school. The support for women is greater because earlier evaluations showed a greater likelihood of women abandoning their studies and at a younger age than men. Lastly, the Programme of Scholarships for Young Mothers and Pregnant Young Women has been implemented in order to stop women aged 12 to 18 who are vulnerable and are young mothers or are pregnant from dropping out.

Net coverage rate by educational level or type and gender (2009/2010)

| Federal entity | Preschool |  |  | Primary |  |  | Lower secondary |  |  | Upper secondary |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Men | Women | Total | Men | Women | Total | Men | Women | Total | Men | Women |
| National (\%) | 79.1 | 78.2 | 80.1 | 105.5 | 104.8 | 106.2 | 82.8 | 81.0 | 84.6 | 51.7 | 49.4 | 54.1 |
| Distribution of enrolment and population by gender |  |  |  |  |  |  |  |  |  |  |  |  |
| National enrolment | 4594382 | 2320066 | 2274316 | 13618795 | 6908930 | 6709856 | 5346073 | 2653612 | 2692461 | 3284511 | 1578779 | 1705732 |
| \% |  | 50.5 | 49.5 |  | 50.7 | 49.3 |  | 49.6 | 50.4 |  | 48.1 | 51.9 |
| National |  |  |  |  |  |  |  |  |  |  |  |  |
| \% |  | 51.1 | 48.9 |  | 51.1 | 48.9 |  | 50.7 | 49.3 |  | 50.3 | 49.7 |

Source: INEE, calculations based on continuous statistics of the 911 format (start of the school cycle 2009/2010), SEP-DGPP, and Forecasts of the population of Mexico, 2005-2050, CONAPO.


## IV. The targets beyond the Millennium Development Goals

## A. Advances and challenges in preschool education coverage (target 3a)

## Target 3 a

Ensure that by 2015, all children between the ages of 3 and 5 receive preschool education and that they conclude it in the prescribed time frame (three years)
15. A growing consensus exists in the field of education research about the importance of providing education during early childhood, because preschool education contributes to better performance during the subsequent education levels (OECD, 2006). For this reason, in 2002, Mexico amended the General Law on Education with the aim of making preschool education mandatory for children aged 3 to 5, this being achieved gradually. The joint effort of the authorities and parents has resulted in an increase of the net enrolment rate in preschool education, which grew from 50.2 per cent in the 2000/2001 school cycle to 70.8 per cent in the 2010/2011 cycle.

## Net enrolment rate in preschool education

|  | 1990 | 1995 | 2000 | 2005 | 2010 |
| :--- | ---: | :---: | :---: | :---: | :---: |
| Preschool coverage 3 years | 7.6 | 10.9 | 15.1 | 24.7 | 37.7 |
| Preschool coverage 4 years | 43.5 | 49.4 | 55.0 | 80.0 | 88.2 |
| Preschool coverage 5 years | 70.0 | 76.9 | 80.7 | 92.8 | 86.6 |
| Preschool coverage 3 to 5 years | 40.2 | 45.6 | 50.2 | 66.6 | 70.8 |
| Preschool coverage 4 to 5 years | 56.7 | 63.13 | 67.1 | 86.5 | 87.4 |

Source: Secretariat of Public Education, historical series and forecasts of education indicators: calculations of the SEP and INEE, based on data from the Census of Population and Housing 2010.
16. As can be seen from the table above, the greatest progress in preschool education coverage has been made for children aged 4 to 5 . However, although the advance in coverage for children aged 3 has been substantial (increasing, in the last 10 years, by more than 100 per cent, from 15.1 per cent to 37.75 per cent), the objective of ensuring that 100 per cent of children aged 3 to 5 receive preschool education is still a long way from being achieved. For this reason, should the current growth trend in this coverage continue, particularly for children aged 3, then Mexico will not achieve the target set for this level of education by 2015. The Mexican Congress approved a provisional article that postponed the entry into force of the mandatory first grade of preschool education, so that instead it be achieved gradually from the 2008/2009 cycle until that of 2011/2012. However, the resources approved to guarantee the availability of educational spaces (classrooms and schools), technical and pedagogical resources (didactic equipment) and the hiring of teachers trained for this level of education, have not been sufficient to advance the coverage at the required rate if target 3 is to be achieved in 2015. According to the figures reported in the 2010 census (INEGI), there are 6,535,234 children aged 3 to 5, of whom, according to the enrolment registered by the SEP, 70.8 per cent ( $4,628,460$ children) are participating in preschool education. The average public expenditure per pupil in 2010 for this level of education was 10,500 pesos (834 US dollars a year). If one were to take into account the $1,906,774$ children who need to be incorporated into the preschool system, then Mexico would need to invest around 20,021,127,000 pesos ( $1,590,240,428$ US dollars) ${ }^{2}$ to be able to meet this level of demand.
17. It should be noted that the differences between federal entities in the advances in coverage of this level of education are independent of the levels of marginalization in the respective states. Guerrero ( 83 per cent) and Chiapas ( 80 per cent) have coverage that is substantially above the national average ( 70.8 per cent), despite being states with very high marginalization. In contrast, states with low marginalization, such as Chihuahua ( 61 per cent) and Estado de Mexico ( 64 per cent), or with very low marginalization, such as Baja California ( 57 per cent) and Aguascalientes ( 60 per cent), have coverage that is below the national average.

[^2]
## B. Advances and challenges in lower secondary education coverage (target 3b)

## Target $3 b$

Ensure that by 2015, all children aged 12 enter lower secondary education and that 90 per cent complete it in the prescribed time frame (three years)
18. Unlike primary education, the universal coverage of lower secondary education is still pending. The teaching of this level of education was made mandatory in Mexico in 1993. At the time, net coverage of lower secondary education in the country stood at 53.3 per cent. During the last 20 years, important progress has been made, given that the net coverage of this level of education grew from 67.4 per cent in 2000 to 82.8 per cent in the 2009/2010 education cycle. However, taking into account the growth rate of this coverage, the country will not achieve the target of 100 per cent coverage that was set among the targets for beyond the millennium.

## Lower secondary education coverage

| Indicator | 1990 | 1995 | 2000 | 2005 | 2010 |
| :--- | ---: | :---: | ---: | ---: | ---: |
| Net rate of lower secondary coverage | $50.9 \%$ | $57.6 \%$ | $67.4 \%$ | $78.0 \%$ | $82.8 \%$ |
| Completion rate in lower secondary <br> education | $73.9 \%$ | $75.8 \%$ | $74.9 \%$ | $78.2 \%$ | $81.6 \%$ |
| Lower secondary drop-out rate | $8.8 \%$ | $8.8 \%$ | $8.3 \%$ | $7.7 \%$ | $6.2 \%$ |
| Timely lower secondary education <br> enrolment | n.a. ${ }^{\text {a }}$ | n.a. | $72.4 \%$ | $75.3 \%$ | $78.9 \%^{\text {b }}$ |
| Timely completion of lower secondary <br> education | n.a. | n.a. | n.a. | $75.3 \%$ | $75.4 \%^{\text {b }}$ |

Source: Secretariat of Public Education, historical series and forecasts of education indicators; calculations by INEE (2011), based on continuous statistics of the 911 format, SEP-DGPP.
${ }^{\text {a }}$ Data corresponding to 2009.
${ }^{\mathrm{b}}$ n.a. = not available.
19. As can be seen in the case of primary education, there are important differences in lower secondary education between the country's federal entities. The states with higher indexes of marginalization tend to have lower coverage in lower secondary education. ${ }^{3}$ If the five entities with the highest rates of lower secondary education coverage are compared with the five with least coverage, the gap comprises more than 20 percentage points. While Chiapas has a coverage of 61.2 per cent and Guerrero 63.2 per cent, Coahuila achieves a coverage of 89.2 per cent and the Federal District achieves almost universal coverage with 99.1 per cent.
20. On the other hand, the country is faced with the challenge of reducing school flow in lower secondary education. For this reason, efforts have been made to reduce the drop-out and failure rates at this level of education. In the first case, the drop-out rate fell from 8.3 per cent in 2000/2001 to 6.2 per cent in 2009/2010. Dropout rates in the federal entities are not necessarily linked to the indexes of

[^3]marginalization in those states. ${ }^{4}$ As has already been mentioned, the Government has implemented a variety of programmes, particularly the Opportunities programme, aimed at bringing down the school drop-out rate. The economic support granted to children of families living in poverty, both during primary and lower secondary education, seeks to provide the economic means for the children to continue their studies. Progress has been made in reducing the drop-out rate in both primary and lower secondary education. However, various factors that go beyond those that are strictly economic in nature can be linked to the drop-out rate of pupils. The multiple causes that can lead a child to cease attending school can include family circumstances, the parents’ education, access to schools, and the low value attributed to education as a means of achieving better future employment. It is with the aim of understanding better the drop-out phenomenon in lower secondary education and in the other education levels, that studies have been started in order to identify the multiple factors that have an impact in this area, and thereby to develop more effective public policies that will allow the reduction of the school drop-out rate to continue (SEP, 2011). On the other hand, in the case of the failure rate, high levels continue to be observed, given that it fell from 20.9 per cent in 2000 to 15.5 per cent in the 2009/2010 school cycle. Such levels have a negative impact on getting the most out of education, because falling behind greatly increases the probability of the pupil eventually dropping out and undermines his performance in the classroom, as has been documented in the various standardized tests that the country has been increasingly applying since 2000.
21. Consistent with the aforementioned results, the completion rate in lower secondary education has improved, increasing from 74.9 per cent in the 2000/2001 cycle to 81.6 per cent in the $2009 / 2010$ cycle. However, as has already been indicated in the case of primary education, the effectiveness of the education system must also be analysed by examining how many of the pupils who finish lower secondary school do so in the time frame foreseen for this level of education. Progress has been made in this area, but important challenges remain. While of every 1,000 young people who enrolled in lower secondary education in the 1998/1999 cycle, 719 completed their studies in the prescribed time, in the 2008/2009 education cycle, 754 did so. Approximately 28 per cent of young people who finished lower secondary school in this last cycle did so with a delay of one or two years. Therefore the country needs to continue its efforts in this area, otherwise the target of having 90 per cent of children aged 12 completing their lower secondary education in the prescribed time frame will not be achieved.

Completion on time or up to two cycles after the prescribed time frame for secondary education (1998/1999-2008/2009)

|  | Completion per 1,000 pupils of school generation |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Secondary | Total completion | Timely completion | One cycle later | Two cycles later |
| $1998 / 1999-2002 / 2003$ | 751 | 719 | 31 | 1 |
| $1999 / 2000-2003 / 2004$ | 776 | 745 | 30 | 1 |
| $2000 / 2001-2004 / 2005$ | 783 | 753 | 28 | 1 |

[^4]|  | Completion per 1,000 pupils of school generation |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| Secondary | Total completion | Timely completion | One cycle later | Two cycles later |
| $2001 / 2002-2005 / 2006$ | 789 | 760 | 28 | 1 |
| $2002 / 2003-2006 / 2007$ | 785 | 757 | 28 | 1 |
| $2003 / 2004-2007 / 2008$ | 782 | 754 | 28 | 1 |
| $2004 / 2005-2008 / 2009$ | 781 | 754 | 27 | 1 |

Source: INEE (2011), calculations based on continuous statistics of the 911 format (start and end of the school cycles 1998/1999-2008/2009 and start of the school cycle 2009/2010), SEPDGPP.
22. In the last 15 years, Mexico has succeeded in increasing by 8.7 per cent the number of those who complete primary education and enter lower secondary education. The absorption rate in lower secondary education went from 87 per cent in the $1995 / 1996$ cycle to 95.7 per cent in the 2009/2010 cycle. However, this indicator takes into consideration all pupils who finished primary education from the previous cycle, irrespective of their age, and who enter lower secondary education. If timely enrolment is taken into account, that is, the proportion of pupils who are no older than 12 when they enter lower secondary education, then progress can be observed (an increase from 72.4 per cent in 2000 to 78.9 per cent in 2009), though the achievements remain insufficient. Should the current rate of growth in this area be maintained, then it is expected that a rate of timely enrolment of 82.7 per cent will be achieved in 2015, and it will be approximately 2040 by the time that 100.5 per cent is achieved (INEE, 2011).

## C. Advances and challenges in terms of quality of education (target 3c)

## Target 3c

Ensure that a significant majority of primary and lower secondary education pupils achieve satisfactory levels of learning in the subjects of language and mathematics, in accordance with the standards and tests set by an independent assessment body
23. During the twentieth century, the main challenge for the Mexican education system was to increase the coverage of education - especially basic education given the high rates of illiteracy and school absenteeism that could be observed at the start of the century. As has already been noted, the country has made significant efforts to increase its rates of education coverage. As rates close to 100 per cent coverage in primary education have been achieved and progress has been made in the other two levels of basic education, so the quality of education has been placed at the centre of the national effort, as a focal point for the benefit of its citizens and society as a whole.
24. The benefits of education, both for the individual and for society (economic growth, reduction of inequality, productivity and capacity for technological innovation), increase in accordance with the improvement in the quality of teaching in the classrooms. Recent research into the effects of human capital on economic growth shows that the contribution of education to development is fundamentally conditioned by its quality (Hanushek and Woessmann, 2007). In accordance with the importance of the quality of education, Mexico committed itself in 2000 to offer an
education to its students that would enable the majority of those who participated in primary and lower secondary education to achieve satisfactory levels of learning in both the subjects of language and mathematics.
25. In setting this objective, the country acquired the commitment of establishing independent assessment mechanisms. The existing assessments until then lacked the technical criteria that would allow adequate comparisons over time, and they contributed little to the evaluation of the degrees of progress in the objectives set out in study plans and programmes. At the same time, it was essential to contribute to an accurate dissemination of such assessments. For that reason, the INEE was established in 2002, under the premise that a good system of assessment is a necessary condition, although not sufficient, to outline public policy strategies aimed at pursuing educational quality. It was therefore necessary to improve the technical quality of the assessment tools; to contribute to a broad dissemination of their results; and to drive forward a national system of education assessment by an independent body.
26. The system of education assessment has been significantly strengthened over the last 10 years through the growing use of standardized tests. These tests are a valuable tool, given that they contribute to the attainment of five objectives:
(a) Determine to what extent students are acquiring the knowledge and skills which the national education system seeks to provide its students;
(b) Identify specific strengths and weaknesses of pupils in their knowledge and abilities;
(c) Identify whether specific population groups exist in which performance in these areas is particularly below the optimal;
(d) Identify both the socio-economic and structural factors associated with educational performance;
(e) Verify whether the education standards set by the Government are being achieved in a satisfactory manner or not.
27. Three kinds of standardized tests need to be highlighted: they complement each other, and are aimed at contributing to the identification of what children and young people are learning in the country's classrooms. At the national level, assessments are carried out through the INEE every four years of a sample of pupils in those grades that are considered to be key for every schooling level and which are rotated every year (third year of preschool education, third and sixth year of primary education, third year of lower secondary education and last year of upper secondary education). These tests, known as EXCALE (Exámenes Para la Calidad y el Logro Educativos) (Educational Quality and Achievement Tests), permit an assessment of the extent to which students are succeeding in acquiring the learning established in the national curriculum. Four areas are assessed: Spanish, mathematics, natural science and civic and ethics training. These tests permit the assessment of the national and state systems as a whole. Their results are at the level of large groups (age, gender, by state and by educational modality) and not at an individual level.
28. On the other hand, with the aim of carrying out individual assessments of students, the Government of Mexico in 2005 decided to implement a national standardized test for all pupils from the fourth year of primary education to the third
year of lower secondary education. ${ }^{5}$ This test evaluates the extent of students' learning compared with the curriculum. The ENLACE (Evaluación Nacional de Logro Académico en Centros Escolares) (National Assessment of Academic Achievement in Schools) assessments evaluate knowledge of Spanish language, mathematics, as well as of a third subject that is rotated every year, thereby covering the entire curriculum. The information derived from these assessments make it possible to carry out diagnostics at the level of the individual, the school group and the school. The entire educational structure of the system of basic education participates in the implementation of these tests (heads of sector, supervisors, technical and pedagogical support staff, school directors and teachers).
29. Lastly, Mexico understands that as a member of the international community, it must participate in education assessment efforts that make it possible to measure the performance of its students and to understand their achievements in relation to those in other countries. Therefore, as a member of the OECD, Mexico has since 2000 been participating in the PISA (Programme for International Student Assessment) test, which assesses the competencies in reading, mathematics and sciences of 15 -year-olds, in order to evaluate their skills in analysing and resolving problems, managing information and coping with everyday life. With these tests, the countries that are being assessed seek to gain an overview of the performance of their education systems, supplying information every three years to set education standards and to be able to understand the causes and consequences of the deficiencies observed in their results.

Standardized tests implemented to measure the quality of education in Mexico

|  | ENLACE | EXCALE | PISA |
| :---: | :---: | :---: | :---: |
| 1. Purpose | Curricular assessment ${ }^{\text {a }}$ | Curricular assessment | Assessment of competencies and abilities |
| 2. Grades to which it is applied | 3 to 6 of primary | 3 preschool | 15-year-olds |
|  | 1 to 3 of lower secondary | 3 and 6 of primary | (27.4 per cent are in the third year of lower secondary, 72.6 per cent in upper secondary) |
|  | Last grade of upper secondary education | 3 of lower secondary |  |
| 3. Application group | Censual | Sample | Sample |
| 4. Application cycle | Yearly | Every four years | Every three years |
| 5. Areas assessed | Spanish, mathematics, natural science and civic and ethics training. In addition, each year another area is added: history (2010) and geography (2011) | Spanish and mathematics in preschool. In addition, natural sciences (biology in the case of lower secondary) and civic and ethics training are added in primary and lower secondary education | Reading, mathematics and science |

[^5]\(\left.$$
\begin{array}{llll}\hline & \text { ENLACE } & \text { EXCALE } & \text { PISA } \\
\hline \text { 6. Feedback } & \begin{array}{l}\text { To pupils, teachers and } \\
\text { schools }\end{array} & \begin{array}{l}\text { To the national education } \\
\text { system and to the state } \\
\text { education system }\end{array} & \begin{array}{l}\text { To the national education } \\
\text { system and to the state } \\
\text { education system }\end{array} \\
& & \begin{array}{l}\text { It permits the performance } \\
\text { of the Mexican education } \\
\text { system to be put into } \\
\text { perspective, compared to }\end{array}
$$ <br>
other systems around the <br>

world\end{array}\right]\)| 2000, 2003, 2006 and 2009 |
| :--- |

[^6]30. With the aim of fostering accountability in the national education system and of stimulating debate and constructive criticism in order to progress with the agenda of educational quality, Mexico has decided to make public all the results of the standardized tests. In the case of the ENLACE assessment, parents receive reports prepared on an individual basis of the performance of their children and a comparison regarding the performance of their group and their school. From the reports, the parents can tell in detail which items their children answered correctly or incorrectly. At the same time, teachers and school directors each receive reports to understand the results of the pupil groups and to be able to compare them with their counterparts in other schools. This makes it possible to identify those areas of knowledge that require improvement, as well as the areas of greatest strength in the educational performance of the pupils. The results of EXCALE and PISA are periodically made public and the underlying data is at the disposal of researchers and all those who are interested in understanding the advances and challenges of the education system for their analyses.
31. The results of both the national and international assessments indicate that Mexico needs to increase its efforts to bolster the quality of its education system. In the case of primary education, the national tests show that Mexico has made gradual
progress in the area of quality, but that it is still a long way from achieving the objective set.
32. The majority of pupils still have insufficient or elementary levels in their learning, both in the language part as in mathematics. In the ENLACE test, for example, in 2006, 78.7 per cent of pupils had insufficient or elementary levels in Spanish and 82.4 per cent in mathematics. In 2010, 63.1 per cent and 66.1 per cent, respectively, continued to obtain not satisfactory or elementary results in the aforementioned subjects. It must be noted that during the same period, the number of children increased who achieved good or excellent levels, increasing from 21.3 per cent to 36.9 per cent in the case of Spanish and from 17.6 per cent to 33.9 per cent in the case of mathematics. The EXCALE test also shows progress, since at the national level statistically significant falls can be observed in the percentage of pupils in the sixth year of primary education with an insufficient achievement in Spanish and mathematics. However, it must be emphasized that both ENLACE and EXCALE highlight the fact that the country faces a major challenge in increasing its efforts with regard to the quality of education. The numbers of pupils with insufficient or elementary achievement have fallen, but they are still significantly high.
33. In the case of lower secondary education, the challenges are even greater. The advances are small, both in the learning of mathematics and Spanish. In the first case, the ENLACE results show that young people in lower secondary education are not being provided with a high-quality education, since the majority of them have insufficient levels of performance. Between 2006 and 2010, it was only possible to reduce by approximately 7 per cent the number of pupils with insufficient levels of learning in both subjects: 88.8 per cent in the case of mathematics and 17.9 per cent in the case of Spanish. Consistent with these results, EXCALE shows significant weaknesses in the quality of the Mexican education system. In the third year of lower secondary school, stagnation is apparent in all types of services assessed and, furthermore, in private lower secondary schools, a statistically significant increase is registered in the proportion of pupils with insufficient achievement in Spanish. Stagnation is also apparent in the teaching of mathematics in the third year of lower secondary school.
34. In addition, it is important to go beyond the national measures and acknowledge that within the universe of challenges regarding educational quality, there are even more worrying substantial differences. Both national tests show that the Mexican education system displays significant inequalities, both taking into account the types of service that it provides, as well as the kind of support that finances them. Furthermore, there are important gaps between the federal entities, which become more acute with the degree of marginalization.
35. As has been noted, the standardized tests warn about the important challenges concerning the quality of the Mexican education system as a whole. However, they also indicate that groups exist within Mexican society that are even more vulnerable and more likely to receive inadequate schooling. Indigenous education; community courses provided in small and remote locations in the country's rural areas; the education provided to children of migrant parents, as well as the education that relies heavily on didactic material broadcast over the television in the lower secondary schools with television support (Telesecundarias) show, in each case, achievement that is below the national average and below the other options of education provision. Although it is true that, for example, in the case of the indigenous population in primary education, there has been a reduction in the number of pupils with insufficient (from 48 per cent to 45 per cent) and elementary
（from 47.6 per cent to 39.6 per cent）learning in mathematics，the results are not satisfactory，all the more so when contrasted with other educational modalities．

36．It is necessary to recognize that these differences in performance cannot be explained solely by the results of the schools，but that they also reflect the different starting points with regard to the social，economic and cultural context of the pupils． If education，as has been recognized by the Mexican authorities，is to be a fundamental path for the development of individuals and society，then the efforts regarding the quality of education necessarily must improve significantly and contribute to lessening the inequalities that exist in the country．The commitment to make progress in target 3c is consistent with this aim．However，Mexico recognizes that the quality of education that is provided in its schools is still a long way from this target and，therefore，it has not been able to contribute to being a primary tool in the reduction of social inequality．The results of the standardized tests show that the education system has not succeeded in establishing effective compensatory formulas that reduce the initial differences among the students that study in the different types of education．

## Results of the ENLACE test in primary education（mathematics）



Source：SEP， 2010.
Results of the ENLACE test in lower secondary education（mathematics）

|  |  | Lower secondary（mathematics）：historical results by educational modality |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | General |  |  |  | Private |  |  |  | Technical |  |  |  | Distance learning （Telesecundaria） |  |  |  | Global |  |  |  |
|  |  | Level of achievement |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Grade | Year |  |  | $\begin{aligned} & { }_{8}^{\circ} \\ & 0 \end{aligned}$ |  |  | $\begin{aligned} & \text { 気 } \\ & \text { 馬 } \\ & \text { 苛 } \end{aligned}$ | 등 |  |  |  | $\begin{aligned} & \stackrel{\rightharpoonup}{\circ} \\ & 0 \end{aligned}$ | \％ |  | 宕 | $\begin{aligned} & \text { 망 } \\ & \hline 0 \end{aligned}$ | $\begin{aligned} & \stackrel{\rightharpoonup}{\text { g }} \\ & \overline{\ddot{U}} \\ & \text { xu } \end{aligned}$ |  |  | 믕 |  |
| 1st | 2009 | 57.2 | 33.9 | 8.2 | 0.7 | 29.2 | 43.2 | 23.3 | 4.3 | 56.7 | 34.0 | 8.6 | 0.7 | 59.5 | 31.6 | 7.9 | 0.9 | 55.2 | 34.3 | 9.5 | 1.0 |
|  | 2010 | 58.1 | 31.9 | 8.8 | 1.2 | 31.8 | 39.4 | 23.3 | 5.5 | 57.3 | 32.4 | 9.2 | 1.1 | 50.9 | 32.1 | 13.5 | 3.6 | 54.3 | 32.7 | 11.0 | 2.0 |
| 2nd | 2009 | 56.0 | 35.8 | 7.6 | 0.6 | 25.3 | 44.0 | 26.2 | 4.4 | 56.4 | 35.7 | 7.3 | 0.6 | 56.8 | 33.5 | 8.6 | 1.1 | 53.7 | 36.0 | 9.2 | 1.0 |
|  | 2010 | 56.1 | 33.5 | 8.9 | 1.4 | 27.9 | 40.2 | 25.0 | 6.9 | 55.8 | 33.7 | 9.0 | 1.5 | 49.6 | 32.0 | 14.3 | 4.1 | 52.4 | 33.8 | 11.4 | 2.4 |
| 3rd | 2006 | 62.2 | 34.4 | 3.2 | 0.2 | 28.4 | 54.7 | 14.8 | 2.0 | 64.8 | 32.1 | 2.9 | 0.2 | 67.2 | 30.4 | 2.2 | 0.1 | 61.1 | 34.7 | 3.8 | 0.4 |
|  | 2007 | 58.0 | 37.6 | 4.1 | 0.3 | 24.9 | 53.4 | 18.9 | 2.8 | 61.1 | 35.1 | 3.6 | 0.3 | 63.5 | 32.8 | 3.4 | 0.3 | 57.1 | 37.3 | 5.1 | 0.5 |
|  | 2008 | 56.8 | 35.8 | 6.9 | 0.6 | 21.9 | 45.9 | 27.1 | 5.2 | 58.8 | 34.4 | 6.3 | 0.5 | 59.7 | 33.1 | 6.7 | 0.5 | 55.1 | 35.7 | 8.3 | 0.9 |
|  | 2009 | 56.3 | 36.0 | 7.1 | 0.6 | 25.6 | 46.4 | 23.9 | 4.2 | 57.4 | 35.0 | 7.0 | 0.6 | 59.1 | 33.4 | 6.9 | 0.7 | 54.5 | 36.1 | 8.5 | 0.9 |
|  | 2010 | 53.1 | 37.8 | 7.6 | 1.5 | 29.7 | 44.2 | 19.8 | 6.4 | 54.2 | 36.9 | 7.4 | 1.5 | 50.3 | 37.2 | 9.7 | 2.9 | 50.9 | 38.0 | 9.0 | 2.2 |
| Global | 2006 | 62.2 | 34.4 | 3.2 | 0.2 | 28.4 | 54.7 | 14.8 | 2.0 | 64.8 | 32.1 | 2.9 | 0.2 | 67.2 | 30.4 | 2.2 | 0.1 | 61.1 | 34.7 | 3.8 | 0.4 |
|  | 2007 | 58.0 | 37.6 | 4.1 | 0.3 | 24.9 | 53.4 | 18.9 | 2.8 | 61.1 | 35.1 | 3.6 | 0.3 | 63.5 | 32.8 | 3.4 | 0.3 | 57.1 | 37.3 | 5.1 | 0.5 |
|  | 2008 | 56.8 | 35.8 | 6.9 | 0.6 | 21.9 | 45.9 | 27.1 | 5.2 | 58.8 | 34.4 | 6.3 | 0.5 | 59.7 | 33.1 | 6.7 | 0.5 | 55.1 | 35.7 | 8.3 | 0.9 |
|  | 2009 | 56.5 | 35.2 | 7.6 | 0.7 | 26.7 | 44.5 | 24.5 | 4.3 | 56.8 | 34.9 | 7.6 | 0.6 | 58.5 | 32.8 | 7.8 | 0.9 | 54.5 | 35.5 | 9.1 | 1.0 |
|  | 2010 | 55.8 | 34.3 | 8.5 | 1.4 | 29.8 | 41.2 | 22.7 | 6.2 | 55.8 | 34.2 | 8.6 | 1.3 | 50.3 | 33.7 | 12.6 | 3.5 | 52.6 | 34.7 | 10.5 | 2.2 |

Source：SEP， 2010.

Percentage of students in the sixth year of primary education in each level of educational achievement in the domains of Spanish and mathematics, as assessed by EXCALE according to school stratum (2005, 2007 and 2009)

| Spanish |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| School stratum | Below basic |  |  | Basic |  |  | Medium |  |  | Advanced |  |  |
|  | 2005 | 2007 | 2009 | 2005 | 2007 | 2009 | 2005 | 2007 | 2009 | 2005 | 2007 | 2009 |
| Public urban | 13.2 | 10.6 | 10.0 | 51.9 | 49.9 | 48.3 | 28.4 | 31.3 | 32.4 | 6.6 | 8.3 | 9.3 |
| Public rural | 25.8 | 20.5 | 20.0 | 56.0 | 56.2 | 55.5 | 16.1 | 19.9 | 20.8 | 2.2 | 3.4 | 3.7 |
| Indigenous education | 47.3 | 42.4 | 43.6 | 46.0 | 49.9 | 45.8 | 6.3 | 7.1 | 10.0 | 0.5 | 0.6 | 0.7 |
| Community courses | 32.5 | n.a. | 34.6 | 56.3 | n.a. ${ }^{\text {a }}$ | 55.2 | 10.9 | n.a. | 9.4 | 0.4 | n.a. | 0.7 |
| Private education | 2.0 | 1.6 | 1.8 | 25.4 | 23.2 | 20.3 | 43.7 | 45.3 | 42.8 | 29.0 | 30.0 | 35.1 |
| National | 18.0 | 13.8 | 14.1 | 50.8 | 49.2 | 47.7 | 24.6 | 28.5 | 28.8 | 6.6 | 8.5 | 9.4 |


| Mathematics |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| School stratum | Below basic |  |  | Basic |  |  | Medium |  |  | Advanced |  |  |
|  | 2005 | 2007 | 2009 | 2005 | 2007 | 2009 | 2005 | 2007 | 2009 | 2005 | 2007 | 2009 |
| Public urban | 13.6 | 12.5 | 10.0 | 52.9 | 50.8 | 56.0 | 26.2 | 28.0 | 26.1 | 7.3 | 8.7 | 8.0 |
| Public rural | 23.7 | 19.9 | 15.7 | 56.9 | 55.7 | 60.3 | 16.5 | 20.4 | 20.2 | 2.9 | 4.0 | 3.9 |
| Indigenous education | 43.2 | 37.4 | 33.9 | 48.8 | 52.8 | 57.2 | 7.3 | 9.0 | 7.9 | 0.6 | 0.9 | 1.0 |
| Community courses | 28.2 | n.a. | 31.0 | 57.9 | n.a. | 59.2 | 13.2 | n.a. | 9.4 | 0.7 | n.a. | n.s. ${ }^{\text {b }}$ |
| Private education | 2.7 | 2.4 | 1.9 | 31.2 | 30.8 | 37.4 | 41.6 | 43.3 | 38.5 | 24.5 | 23.5 | 22.2 |
| National | 17.4 | 14.7 | 12.3 | 52.3 | 50.4 | 55.6 | 23.5 | 26.5 | 24.4 | 6.9 | 8.4 | 7.6 |

Source: INEE (2005, 2007, 2009). EXCALE (Exámenes Para la Calidad y el Logro Educativos) (Educational Quality and Achievement Tests), for students in the sixth year of primary education.
${ }^{\text {a }}$ n.a. = not applicable.
${ }^{\mathrm{b}} \mathrm{n} / \mathrm{s}$. = sample size insufficient.

Basic education pupils by level of achievement in Spanish and mathematics according to EXCALE tests in 2005, 2007 and 2008
Insufficient performance

| Spanish |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| School stratum | Sixth year of primary |  | School stratum | Third year of lower secondary |  |
|  | 2005 | 2007 |  | 2005 | 2008 |
|  | \% | \% |  | \% | \% |
| Public urban | 13.2 | 10.6 | General | 29.7 | 34.7 |
| Public rural | 25.8 | 20.5 | Technical | 31.1 | 33.7 |
| Indigenous education | 47.3 | 42.4 | Distance learning (Telesecundaria) | 51.1 | 50.1 |
| Private education | 2.0 | 1.6 | Private | 8.1 | 11.9 |
| National | 18.0 | 13.8 | National | 32.7 | 35.9 |
| Mathematics |  |  |  |  |  |
| School stratum | Sixth year of primary |  | School stratum | Third year of lower secondary |  |
|  | 2005 | 2007 |  | 2005 | 2008 |
|  | \% | \% |  | \% | \% |
| Public urban | 13.6 | 12.5 | General | 50.5 | 50.5 |
| Public rural | 23.7 | 19.9 | Technical | 52.0 | 54.0 |
| Indigenous education | 43.2 | 37.4 | Distance learning (Telesecundaria) | 62.1 | 62.1 |
| Private education | 2.7 | 2.4 | Private | 23.7 | 24.5 |
| National | 17.4 | 14.7 | National | 51.1 | 51.9 |

## Advanced performance

| Spanish |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| School stratum | $\begin{gathered} \text { Sixth year ot } \\ \text { primary } \end{gathered}$ |  | School stratum | Third year of lower secondary |  |
|  | 2005 | 2007 |  | 2005 | 2008 |
|  | \% | \% |  | \% | \% |
| Public urban | 6.6 | 8.3 | General | 4.6 | 5.7 |
| Public rural | 2.2 | 3.4 | Technical | 4.5 | 6.0 |
| Indigenous education | 0.5 | 0.6 | Distance learning (Telesecundaria) | 1.2 | 1.4 |
| Private education | 29.0 | 30.0 | Private | 22.2 | 21.2 |
| National | 6.6 | 8.5 | National | 5.3 | 6.1 |
| Mathematics |  |  |  |  |  |
| School stratum | Sixth year ofprimary |  | School stratum | Third year of lower secondary |  |
|  | 2005 | 2007 |  | 2005 | 2008 |
|  | \% | \% |  | \% | \% |
| Public urban | 7.3 | 8.7 | General | 1.1 | 1.6 |
| Public rural | 2.9 | 4.0 | Technical | 0.9 | 1.7 |
| Indigenous education | 0.6 | 0.9 | Distance learning (Telesecundaria) | 0.5 | 0.9 |
| Private education | 24.5 | 23.5 | Private | 7.0 | 9.7 |
| National | 6.9 | 8.4 | National | 1.4 | 2.1 |

Source: INEE, 2011.
37. The PISA results are also consistent with what the national tests have revealed. An important number of young Mexicans has not reached high levels or levels above what is considered a minimum in order to do well in contemporary society. A comparison between the average score obtained between 2000 and 2009 in reading (422 and 425) and sciences (422 and 416) indicates little progress in these areas. In the case of mathematics, there are encouraging signs in that Mexico has been one of the countries with the greatest progress in the standardized results in respect of itself, given that it has achieved an important advance in the average scores of 15 -year-olds, having gone from 385 in 2003 to 419 in 2009 (OECD, 2011). The advances in mathematics can be explained mainly through the reduction in the percentage of pupils with a level of insufficient or less, which in 2003 was 66 per cent, while in 2009, it was 51 per cent. The Government has implemented various programmes to strengthen the techniques of teaching mathematics among teachers. Although the results are moving in the right direction, it is essential to accelerate the pace in order to continue reducing the high number of 15 -year-olds with an insufficient grasp of mathematics.
38. In the case of reading, a more detailed look according to federal entity makes it possible to highlight the contrasts in performance in the states of Mexico. At the level of the federal entities, there are states with average scores that are substantially above the national average of 425 points, such as the Federal District (469), Aguascalientes and Chihuahua (both with 449) and Nuevo León (450). In contrast, there are entities far below the national average: Oaxaca (395), San Luis Potosí (399), Tabasco (391), Guerrero (374) and Chiapas (364).
39. It needs to be said that there is a degree of resistance to expanding the culture of standardized assessment in the national education system. In federal entities such as Michoacán and Oaxaca, the refusal by a significant group of teachers to adopt
these assessment mechanisms has seriously limited their coverage. Without a doubt, every assessment tool can be improved. It is through academic research and the assessment of public policy, as well as through dialogue between the authorities, teachers and parents, that it is possible to make progress in the areas of opportunity to strengthen the system of education assessment. However, what is not acceptable, is to believe that without instruments of measurement to assess the achievements in the classrooms of the national education system, it is possible to have a serious debate over policies to improve the quality of education. The international experience, both in developed and developing countries, shows a growing use of these kinds of tools to bolster public policies in the field of education.

Average scores of 15 -year-olds in the competencies of reading, mathematics and sciences as assessed by PISA (2000, 2003, 2006 and 2009)

| Year | Competencies |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Reading |  |  | Mathematics |  |  | Sciences |  |  |
|  | Average | Insufficient | Sufficient | Average | Insufficient | Sufficient | Average | Insufficient | Sufficient |
| 2000 | 422 | 411.2 | 432.7 | 387 | 376.4 | 398.2 | 422 | 411 | 432 |
| 2003 | 400 | 386.5 | 413.0 | 385 | 373.4 | 397.0 | 405 | 394 | 416 |
| 2006 | 410 | 403.9 | 416.1 | 406 | 400.3 | 411.7 | 410 | 405 | 415 |
| 2009 | 425 | 421.1 | 428.9 | 419 | 415.5 | 422.5 | 416 | 412 | 420 |

Source: Rafael Vidal and Maria Antonieta Díaz, Results of the PISA tests 2000 and 2003 in Mexico (Mexico, INEE, 2004); Maria Antonieta Díaz, Gustavo Flores y Felipe Martínez, PISA 2006 in Mexico (Mexico, INEE and estimates of the Educational Indicators Direction of the INEE, 2007); ibid., Mexico in PISA 2009 (Mexico, INEE and estimates of the Educational Indicators Direction of the INEE, 2010).

## Efforts made to advance towards the objective of quality of education

40. With regard to the challenges relating to quality of education, the federal Government has promoted a variety of public policies:
(a) Programme of Quality Schools. With the aim of improving the educational achievement of the pupils in public basic education schools, the Government has implemented, since the 2001/2002 cycle, a programme that has benefited 40,790 schools across the country by means of direct funding aimed at improving the school management processes. This funding has been used to purchase technical equipment, books, items, furniture, as well as to refurbish and fit out educational spaces. In some instances, the funding has also been used to strengthen the training of teaching staff, management and parents who sit on the Social Participation Councils.
(b) Full-time schools and extended day schools. A pupil in primary education spends an average of four hours a day in the country's public schools. With the aim of contributing to the strengthening of the quality of education, two programmes have been developed to increase the time that pupils spend at school: Full-time schools and extended day schools. Under the first modality, 2,000 primary schools in the country have school days that last from 8.00 to 16.00 . In these schools, in addition to the subjects included in the curriculum, the pupils carry out activities such as learning a second language and information technology, together with
physical education and art activities. In this scheme, the education authority provides meals to the pupils of the participating schools. Similarly, the extended day schools add two hours to their timetable with the aim of strengthening the development in the subjects of reading and mathematics, together with the understanding of science, learning of English as a second language and the development of the ability to use computers.
(c) Changes to the design of some of the standardized tests and the transformation of the system of teacher assessment. Mexico is starting to implement actions in which the use of the diagnostics provided by the system of education assessment is essential for the design of policies aimed at improving the quality of education.
41. The teacher plays a fundamental role in the progress and performance of the pupils. For this reason, it is believed that the standardized tests must serve the teachers and school directors to understand the strengths and weaknesses of their work in the classrooms. As already occurs with the pupils, various education systems around the world have begun to incorporate standardized exams in their systems of teaching assessment. Since 1992, Mexico has implemented a system of incentives for teachers, known as Carrera Magisterial, in which one of the elements that is taken into consideration is the educational progress of the pupils. However, this system does not imply the universal assessment of all teachers, nor does it contemplate the periodic assessment of those teachers who are beneficiaries of the economic incentives provided by the programme. At the same time, there are flaws in the existing system of measuring the education performance in Carrera Magisterial. For that reason, the authorities are currently negotiating with the teachers' trade union with the aim of incorporating into the system of assessment the performance of pupils in ENLACE. At the same time, and consistent with the agenda of educational quality, the Mexican authorities recognize the need to carry out a universal assessment of all the individuals who are at the front of the classrooms in the country's system of basic education.
42. The incorporation of these tools responds to the need for more precise, external assessment elements of the work of teachers. However, it must be noted that the incorporation of the standardized tests into the system of teacher assessment must be done with the greatest possible technical rigour and by developing measures that ensure their validity and reliability. It is essential to ensure clarity and precision in various measures of educational performance. The analysis of the standardized tests must take into account socio-economic and cultural factors, as well as the structural conditions of the education system that have an impact on pupils' performance. The level of education of the parents; socio-economic conditions in families; access to the learning tools of the twenty-first century, such as computers with Internet access; the state of the infrastructure of the school attended by the pupils; the director's management of the school - are, among others, factors associated with the performance of pupils that must be analysed. However, the international experience in other education systems, such as in Israel and the United Kingdom of Great Britain and Northern Ireland, or state experience such as in Texas and North Carolina in the United States of America, points to the development of appropriate statistical techniques that make it possible to control for such factors when assessing the contribution of a teacher to the education performance of his pupils (Podgursky and Springer, 2006).
43. With the aim of recognizing the work of teachers, a programme of additional incentives has been started that favours those teachers whose pupils achieve a better performance in the ENLACE tests. However, measures need to be developed to avoid the phenomenon of copying. Once again, the international experience warns of the need to strengthen the protection against copying, given that when linking the standardized tests to high-impact consequences, such as teaching assessments and economic incentives, it is inevitable that some teachers will succumb to the temptation of allowing pupils to copy from each other in order to attain the benefits conditioned upon the standardized results. For that reason, it is necessary to develop measures so that as these tools are incorporated into the assessments of teachers, they continue to provide information in order to run diagnostics of the Mexican education system that direct the public policies towards strengthening educational quality in the country. At the same time, it is necessary to continue adjusting the tests in order to avoid the temptation of teaching to the test at the expense of other subjects of importance to the education of the pupils and which are not assessed within the standardized tests.
44. At the same time, serious thought needs to be given to the two different approaches that can accompany the use of the standardized tests and a decision needs to be made as to which is the most suitable path for their incorporation into the assessment of teachers (Ladd, 2007). On the one hand, a focus on status, that is, on the levels of achievement in the standardized exams: this achievement favours the percentage of students who obtain a satisfactory level of competence in said tests. On the other hand, the value added or growth approach, which emphasizes the changes observed in the individual levels of learning of the pupils throughout their studies. For this, technical adjustments pertaining to ENLACE must be made in order to measure the longitudinal performance of the pupils.

## V. Final considerations

45. Mexico has made advances in the coverage of basic education, achieving universality in primary education in accordance with the target set in the Millennium Development Goals. However, Mexico must still redouble its efforts to guarantee the right to a preschool and lower secondary education that the constitution affords both children and young people.
46. The national system of education must strengthen the quality of the education that it provides to its pupils. Such quality first of all requires efforts to guarantee that the majority of pupils finish their studies within the prescribed time frame foreseen for each of the education levels taken. Otherwise the objectives of coverage and educational quality will not be fully achieved, given that pupils who significantly fall behind tend to achieve a lower performance in school in subsequent grades and are more likely to abandon their studies.
47. The benefits of the increase in education coverage will be limited if the country does not advance at a greater rate in improving the quality of education in Mexican classrooms. The inequality that exists between the choices of public or private education, and within the public system itself, warn of the need to redouble efforts so that education can be an effective tool in overcoming inequality of opportunity and so that it contributes to breaking effectively the vicious circles of poverty among the less favoured sections of society. It is encouraging to see that the
gender differences in the access to education have practically disappeared. In this, programmes such as Opportunities have played a key role in strengthening access to education for children - and in particular for girls - who are vulnerable. However, for actions of this kind to continue bearing fruit, it is necessary that the coverage be accompanied by educational quality.
48. In pursuing the agenda of quality, the country has taken steps in the right direction by developing better systems of assessment. However, it faces the challenge of making more targeted use of the information generated by the national and international standardized tests that are applied within the education system. The drive towards academic research and the assessment of public policy that makes use of the material generated by these assessment tools must be a required step in the agenda of educational quality. These efforts must accompany the design of public policies aimed at strengthening the training of teachers. For this reason the country needs to keep strengthening its assessment bodies, with the aim of having more comprehensive diagnostics of the factors that have an impact on the benefit of education. It is essential to use the information generated to provide feedback to teachers with the aim of identifying strengths and weaknesses in the teaching in the country's classrooms.
49. The differences among the achievements of the state education systems in the federal entities highlight the need for the local authorities to embrace more strongly the agenda of coverage and educational quality in the country. In 1992, a reform was adopted that decentralized basic education, thereby increasing the joint responsibility between the state and federal governments to provide public education. While it is true that that reform incorporated limitations in keeping important areas of education policy under federal control, it is also true that it transferred greater responsibilities to the state authorities. These must become primary actors in the agenda for the reform of educational quality. Under the current legal framework, it is possible to have areas of experimentation in public policy in the states, though these have not developed appropriately, with a few exceptions. The joint responsibility for education between the levels of government still has a long way to go. This must be done at a faster pace with the aim of making coordinated efforts to strengthen the provision of education services in preschool and the rest of the levels beyond primary education, at the same time that they contribute to the improvement of the quality of education in the country.

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[^0]:    * $\mathrm{E} / 2011 / 100$.

[^1]:    ${ }^{1}$ The programme started in 1997 and from the 2001 school cycle it also began to grant scholarships to young people living in poverty who are looking to continue their upper secondary education.

[^2]:    2 Taking the average annual exchange rate of 12.59 in 2010 (BANXICO). Average public expenditure per pupil in preschool education (SEP, 2011).

[^3]:    3 The correlation between the index of marginalization by federal entity and the net rate of enrolment in lower secondary education is high ( -0.72 ) and statistically significant at the 99 per cent level.

[^4]:    4 The correlation between the index of marginalization by federal entity and the drop-out rate in lower secondary education is small (0.21) and is statistically insignificant.

[^5]:    ${ }^{5}$ Later, the pupils of the third year of primary education were also included.

[^6]:    ${ }^{a}$ In the case of the ENLACE test, competencies and not curriculum are assessed for the upper secondary education.
    ${ }^{\text {b }}$ From 2003 onwards, Mexico included an oversample with the aim of achieving national and state representation.
    ${ }^{\text {c }}$ Data corresponding to the assessment carried out in 2010 (SEP).

