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Report on Assessment Practices of Basic Education in Mexico, 2010

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EXECUTIVE BRIEF

The framework of the Report on Basic Education Assessment Practices in México is based on the context of the second phase, Country Background Report for Mexico, Project for Evaluation and Assessment Frameworks for Improving School Outcomes coordinated by the Organisation for Economic Co-operation and Development [OECD]. Its objective is to offer solid information to interested audiences at national and international levels on practices and efforts for evaluating different components of the Educational System in Mexico for grades one through nine. This information would place emphasis on the public sector, considering the context, the state in which diffusion is found and use of results of said objections and opinions held, in that respect, on challenges being faced in the field.

The following methodology was designed to prepare the Mexican Report. Firstly, a plan was created for evolution of the report, which contained for each chapter: the purpose, test components to be answered and proposed by the OECD, sources of information to consult and methods of gathering information through questionnaires and interviews with eleven key participants from the education sector and assessment in Mexico. Secondly, State Assessment Areas [AEE] were contacted to request information from them on their efforts and assessment practices in basic and lower secondary levels. Thirdly, and simultaneously, meetings were held with review groups, who gave feedback on the progress made in each chapter.

CHAPTER I. THE NATIONAL EDUCATION SYSTEM

Mexico has a population of more than 100 million inhabitants with population concentrated in large cities, but dispersed over extensive territory and a heterogeneity derived from the population’s socio-demographic characteristics and ethnic-linguistic diversity. These aspects create challenges to demands and needs, which the National Educational System [SEN] must attend.

Every inhabitant of Mexico has the right to education, an individual guarantee granted by the Political Constitution from the start of the 20th century. The current SEN sustains itself mainly on Article 3 of the Constitution and the General Education Law [LGE]. To date, approximately 33 million students, one and a half million professors and 248 thousand schools form the SEN. The SEN imparts three levels of education: basic, upper secondary and tertiary, offered in scholarised, non-scholarised and mixed modalities, as well as additional non-obligatory or scholarised services. Of the total SEN enrolment, 75.9% is in basic education, 11.6% in upper secondary, 8% in higher education and 4.5% in job training. Basic education is obligatory and has three levels, pre-primary, primary and lower secondary.

There are two relevant historic stages to consolidation of the SEN. The post-revolution stage, covering from 1917, with the promulgation of the Political Constitution of the United Mexican States, until 1992, and the SEN decentralization stage from 1992, the year in which the National Agreement for the Modernisation of Basic Education was signed [ANMEB]. This political agreement transferred the operation of federal basic education services, initial formation, what was available to teachers and the possibility of reconstructing a State Education System, while the SEP reserved normative faculties to ensure uniformity of these services throughout the country, which guaranteed the national character of the SEN. Likewise, Article 3 of the Constitution was reformed with the signing of this Agreement, establishing basic education as pre-primary, elementary and lower secondary, reiterating the obligatory nature of the primary level and incorporation to secondary education.

Important changes were made in the last decade. In 2000, with political alternation of the Federal Government, a need arose for new institutional spaces between the federal government and states. In 2002, The National Institute for Education Assessment and Evaluation [INEE] was created. In 2008, the Federal Government and the National Teachers Union SNTE signed the Alliance for the Quality of Education [ACE] with the intention of promoting transformation in SEN education quality aligned to the Education Sector Programme 2007-2012.

SEN semblance allows contextualisation of assessments conducted in the basic education setting, as follows:
CHAPTER II. OVERVIEW OF BASIC EDUCATION ASSESSMENT IN MEXICO

Assessment of different components of basic education in Mexico in primary and lower secondary levels have developed over the past four decades and in three periods: the first covers from 1970 to 1980, the second includes up to the 1990s and the third is from 2000 to date.

In the 1970s, the SEP promoted the gathering, systematisation and updating of census information to create SEN statistics. With that, other assessment practices were developed, which responded to the priority education policy of the time related to obtaining systematic information on the SEN, diagnosing students’ learning level, strengthening normal education and granting federal plazas prioritising the academic merits of educators. The 1990s represented a significant change in respect to the previous decade, which was characterised by the establishment of an educational policy for assessment; the emphasis with which programmes were accompanied by an assessment for accountability; the granting of acknowledgments and assessment of results; establishment of a legal framework for LGE assessment and bases for classroom assessment; Mexico’s participation in international assessments; and strengthening of the SEP agency in charge of assessment. In 2000, education policy conferred a strategic role to assessment as an essential part of the planning, follow-up and accountability of education authorities. The government education policy in vigour is in the framework of the National Development Plan 2007-2012 [PND], the Education Sector Programme 2007-2012 [PROSEDU] and the ACE policy agreement.

The LGE, which is the legal framework for evaluating basic education in Mexico, establishes that assessment is an attribution of federal education authorities. Agencies responsible for the subject-matter are constituted by the Federation, represented by the SEP; states, represented by local educational authorities; specialised technical national and public agencies external to the education sector, such as the INEE, the National Council for the Evaluation of Social Development Policy [CONEVAL], private agencies, such as the National Assessment Centre for Higher Education [CENEVAL], and international organisations, such as the Organisation for Economic Cooperation and Development [OECD] or the United Nations Educational, Scientific and Cultural Organization [UNESCO], as well as other collegiate agencies between the federation and states.

The publication and use of assessment results has been conducted in three stages. The first period is characterised by an almost non-existent disclosure of assessment results, even at the level of national and state education authorities, hence results were not used to offer feedback to the SEN or make decisions on the education policy. In the second period, the education policy at the time recognised that assessments were not being released and the need for accountability was explicit. In the same manner, support given to compensatory programmes, momentum to the National Teaching Career Programme [PNCM], development of national standard tests and Mexico’s participation in international projects set the bases to initiate the publication of results among national and state educational authorities. In the third period, the education policy conferred an important role on the release and use of results, for which diverse assessments are currently transmitted publicly, but the use of results for decision-making oriented to improving assessed components still needs strengthening.

CHAPTER III. SEN ASSESSMENT EFFORTS: INFORMATION SYSTEMS AND LARGE-SCALE ASSESSMENT

From the 1970s, the SEP started to promote efforts to gather, systematise and update information on students, teachers and schools forming the SEN. Currently, proposals and practices, developed in Mexico to obtain and integrate systematised information and as input to assess the SEN are divided into two types. The first refers to the construction of information systems on the situation of different SEN components by calculating indicators, which allow obtaining an x-ray of it. Included in this framework are the SEP Continuous Statistics System and National Education Indicator System [SININDE] of the SEP and INEE. The second refers to large-scale assessments applied to sample groups of students and teachers at both national and international levels to see results of the system in the education achievement setting and have an
external reference allowing the SEN to be assessed and compared to education systems of other countries. Found among them are, the and Educational Quality and Achievement Tests [Excale], Trends in International Mathematics and Science Study [TIMSS], Comparative Regional Studies and explanatory comments of the Latin American Laboratory for Assessment of the Quality of Education [LLECE], Programme for International Student Assessment [PISA] and the Teaching and Learning International Survey [TALIS].

Currently, these efforts are accompanied by policy initiatives that attempt to consolidate information registration systems on students, teachers and schools to improve the quality of information obtained from the SEN, among which the National Student, Teacher and School Registry [RENAME] stands out.

CHAPTER IV. SCHOOL ASSESSMENT

With the signing of the ANMEB, schools were structured as being the place where learning took place, for which it was recognized that learning is also the school’s responsibility and the manner in which it is managed. With the publishing of the LGE, public school assessment was established as an attribution of educational authorities. Since then, school assessments have been conducted in practice through self-assessment efforts with the aim that schools voluntarily detect their strengths and weaknesses and create improvement strategies.

School assessment practices have been focused on developing proposals such as the School Project to improve basic skills and the National Council for Educational Promotion [CONAFE] and the Strategic School Transformation Plan [PETE] of the Quality School Programme [PEC] to prepare proposals and integral self-assessment systems and studies on Conditions of Education Offering [COE] by the INEE-Directorate of School Assessment [DEE].

Policy initiatives on matters of school assessment focus on the development of management standards in scholastic centres as a base to perfect self-assessment models and propose an external assessment model. Since 2009, the DGEP has been working in the National Accreditation System for Basic Education School [SNACEEB].

CHAPTER V. TEACHER ASSESSMENT

Teacher assessment in Mexico has been a constant SEN component because of the need to regulate incorporation of teachers to the system. Since 1992, teacher assessment has played an important role in the SEN by referring to the importance of teachers, their initial and in-service training, and the relationship established with students. The PNCM was formed in 1993 with the intention of promoting their professionalism, an effort that was the first systemic assessment experience of teachers throughout the country.

Current teacher assessment practices include the Vertical Promotion System [EV], the PNCM, National Continuous Training Exams for In-service Teachers [ENAMS], the National Exam of Teaching Knowledge and Skills [ENCHD], Diagnosis and Classification Instrument for Normal School Enrolment [IDCIEN], General Examinations for Bachelor's Degree Graduation [EGEL]. As for policy initiatives, steps have been taken since 2002 to update general PNCM guidelines and strengthen its assessment system.
CHAPTER VI. STUDENT ASSESSMENT: IN AND BEYOND THE CLASSROOM

Student learning assessment by teachers is a component that has always been present in the SEN. Aside from the teachers’ classroom assessments, external agencies also assess the teacher responsible for the construction, application and analysis of standardised tests covering a large number of students, especially those with the objective of diagnosis or recognition, and whose background is in the 1970s got a major boost in the 1990s.

Basic education in primary and lower secondary assessment in classrooms is regulated by the LGE, corresponding Ministerial Agreements and study guidelines on Programmes and Plans in vigour. Teachers must conduct a bi-monthly assessment and the average of the assessment for each period is the final assessment, in which it is determined whether the student proceeds to the next grade, or not. Aspects to appraise, as well as the criterion-based assessment\(^3\), instruments and procedures, though based on the curriculum, are the responsibility of the teacher, which does not assure that said assessments appraise student learning in an extensive and solid manner.

Meanwhile, student assessment outside the classroom now includes application of the Instrument for Testing New Lower Secondary School Students [IDANIS], the Children’s Knowledge Olympics [OCT] and the National Assessment of Academic Achievement in Schools [ENLACE], as well as special assessments conducted in some federal entities.

As for policy initiatives, concerns of the SEP, in co-ordination with the INEE, are designing a proposal to assess classroom learning, and the SEP gives momentum to a continuous education course with the aim of strengthening teaching skills in this setting, as well as the development of complementary studies with the results of ENLACE applications. Large-scale student assessment is considered the most consolidated in respect to other assessment practices of different SEN components.

CHAPTER VII. OTHER ASSESSMENTS, FEDERAL EDUCATION PROGRAMMES

Besides efforts to contribute SEN assessment elements and practices of specific components, such as schools, teachers and students, there are assessments of Study Plans and Programmes, such as pedagogical reform in pre-primary education; of education policies, such as assessment of implementation of the policy for attention to indigenous education; education materials such as free text books; and federal programmes of the education sector.

In the 1990s, and in line with federal programmes of the education sector, different compensatory education programmes were promoted, some of which were pioneers in including the assessment component to account for their functioning and resources granted. In 2004, the social development policy was conceived and embodied in the General Law on Social Development [LGDS], which establishes that programmes of the education sector play an important role in the federalisation setting. A federal assessment proposal on government thinking has existed since 2007, regarding social development issues of great importance in terms of design and results, efficacy and impact, and transparency and accountability regarding the use of public resources by the federal government.

In 2010, 112 federal programmes are in effect, of which 35 are subject to specific performance assessment, 55 are assessed with a strategy approved by the CONEVAL, coordinated and paid for by the UPEPE and SEP, while 22 have no assessment. Assessment of the programmes is linked to others on the progress made toward goals, the budget year and achieving objectives and goals of the education policy. Results are used to improve the operation and method of reporting progress made on programmes as well as their instruments.
INTRODUCTION

The Report on Basic Education Assessment Practices in Mexico falls into the context of Evaluation and Assessment Frameworks for Improving School Outcomes coordinated by the Organisation for Economic Co-operation and Development [OECD]. The purpose of this project is to document framework for the assessment conducted in different countries as part of their efforts to promote education quality, equity and efficiency imparted in basic education in primary and lower secondary levels.

Through this project, the OECD provides a frame of reference, so governments can compare policies and experiences, and seek answers to common problems to identify and share good practices in matters of education assessment. In that context, the OECD offers orientation to ensure that different assessment and measurement techniques are articulated correctly through the use of an appropriate strategy to improve school results; and that existing procedures and instruments for assessment coincide with the objective of assessment, adjust to involved stakeholders, align with objectives proposed in the policy and support the strength of using results of assessments.

This project is focused on the assessment of different components of educational systems – students, systems, schools, teachers and programmes in response to the following questions: What is being assessed? Which elements are being assessed? Why are they being assessed? How are they assessed? Who are the stakeholders involved in the assessment? Who is responsible for conducting the assessment? In the same manner, these practices are contextualised by considering factors, which are in play at society, education system and school levels.

In 2009, Mexico decided to take part in this project through the Secretariat of Public Education (SEP), because of commitments established in the Alliance for the Quality of Education 2008, and agreements signed with the OECD for following up some elements of said agreement. This project has three phases: the first is an analysis phase among involved countries, the second phase is a review by each country and the third is a synthesis phase.

This report is inserted in the second phase called, in Mexico, Country Background Report for Mexico. In this phase, countries were invited by the OECD to prepare a report on assessment practices in each country, and based on that, make recommendations for the development and implementation of policies. Responsible parties in the countries and OECD determined the focus of this work jointly.

Mexico takes part by preparing a report that meets the aim of offering solid information to interested audiences at national and international levels on the practices and assessment efforts of different components of the Mexican Educational System, a basic type in primary and lower secondary levels, considering the context, the state in which dissemination is found as well as the use of results of said assessments and opinions held regarding challenges faced in the field. It should be stressed that this report is focused, at the request of the OECD, on basic education in primary and lower secondary levels, mainly of the public sector.

Audiences who will read the report are the Secretariat, members of the OECD and countries taking part in the project, as well as those interested in assessment issues in each country and at an international level.
**METHODOLOGY FOR PREPARATION OF THE MEXICAN REPORT**

Guidelines proposed by the OECD for making out the report examine assessment practices and policies of each country in an analytical framework, which allows each of them to know its own experiences and uncover relevant findings to establish comparisons and generate lessons learned among participating countries. The aforementioned recognises the difficulty of making comparisons and assuming the need for awareness of the educational, economical, social and political context of each country. These guidelines consist of a series of guided questions, with each country being free to answer them to the best of their ability and respective progress.

Preparation of the Mexican report took six months of work and implemented the following methodology. Firstly, a plan was designed for its preparation, which contained, for each chapter, the purpose, questions to be answered that were proposed by the OECD, sources of information consulted and data gathering methods. The data gathering method used was document analysis, obtaining information by means of questionnaires and conducting interviews with eleven protagonists of the education sector and assessment in Mexico. Secondly, contact was established with the State Assessment Areas [AEE] to request information on their efforts and basic assessment practices in basic and lower secondary levels. Thirdly, meetings were held simultaneously with review groups to obtain feedback on the progress made in each chapter and direct the report in a collegial manner.

An intense search for documental analysis was undergone, which allowed the description of progress made in assessment practices for diverse components of basic education. Similarly, unedited documentation not available on line or whose publication is restricted to internal use by the states was requested from different internal and external agencies of the SEP. One or various questionnaires with questions specified by the OECD were also given to them in order to obtain official assessments by educational authorities and detect which key actors in the educational or assessment system in Mexico could be interviewed. That involved carrying out different tasks, including the creation of a general questionnaire by chapter, sending out the respective questionnaire for it to be answered by said agencies, and in some cases, specific questionnaires. Later, the information was integrated and analysed.

Additionally, the AEE was contacted, to request information on its assessment efforts and practices in primary and lower secondary levels, its legal framework, existence of state assessment institutes and link to Universities for creating assessment tasks. Electronic responses were received from only 15 states, some of which sent information that was highly valuable to this report. Information on the state of Sonora was obtained by a search in Internet. Nine of the 16 states do their own assessments at a state learning level, teachers, heads of sector and supervisor and/or programmes; and six states use the results of the assessments on students in the federal setting of different studies. It should be mentioned that these efforts show good progress in assessment issues in other states of the Mexican Republic, which were not reported, and are therefore not explained in this report.

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1. The process for completing the task consisted of the following stages: 1) Design of the plan for preparation of the report in Mexico, 2) Request for information by chapter, 3) UPEPE management to obtain information from various agencies of the SEP and external sources, 4) Review and analysis of gathered information and additional documents by chapter, 5) Preparation of first drafts of the chapters, 6) Review of drafts of chapters with the Expanded Review Group formed by consultants of the head of the UPEPE and the INEE Directorate-General and International and Special Project Director, 7) Reception and systematisation of written comments by members of the Expanded Review Group, 8) Review of the draft of chapters in a meeting with the Compact Review Group formed by some consultants of the head of the UPEPE and the Expanded Review Group, 9) Preparation of a list per chapter of missing information and the obtaining of needed documentation, 10) UPEPE management for the conciliation of interviews with protagonists, 11) Preparation of interview guides per protagonist, 12) Progress of interviews with protagonists, 13) Analysis of information resulting from interviews, 14) Preparation and integration of the first complete version of the report, 15) Review of the first version by different agencies that provided information for preparing the report, 16) Preparation of the first complete version of the report with integration of comments, 17) Delivery to the OECD of the first complete version of the report, 18) Reception of observations by the OECD, 19) Incorporation of additional information requested by the OECD, 20) Delivery of the final version of the report to the OECD.
Interviews with protagonists had the objective of achieving greater comprehension of the context in which assessment practices arise, clarifying doubts and broadening information obtained in questionnaires. The protagonists recommended by government agencies were five education authorities with different responsibilities, two representatives of teachers, three investigators from prestigious national universities and one representative of civil society. The UPEPE was in charge of these efforts.

Each interviewee was considered a specialist in one of the chapters of the report, which made content of the interview vary. Therefore, the presentation of their arguments is confidential and only coincidental points stand out. Their testimonies, opinions and proposals, along with information provided by the different participating agencies outlined the POLICY INITIATIVES in each chapter and the CHALLENGES of basic education assessment in Mexico. The section on CHALLENGES incorporates specific and convergent thinking among the interviewees with the only intention being to underline important aspects to consider for decision-making and in future analyses on basic education assessment in Mexico.

In summary, the analysis of information from documents, questionnaires, information of the states and interviews conducted was developed in light of the purpose and questions specified by the OECD in each chapter of the report.

The review process for the report was based on three activities: a) Reading of the chapters and issuing of written comments and suggestions by those involved; b) Meetings with a Compact Review Group; and c) Meetings with an Expanded Review Group. The Review Groups consist of education authorities from different agencies of the SEP and INEE. The differences between these groups were the number of members and frequency of meetings. Members of the Compact Review Group were also in the Expanded Review Group. Meetings of the Compact Review Group took place after the draft of a chapter was submitted, while the Extended Review Group held three meetings to comment on drafts of two or three chapters and make decisions on which direction to take. Guest reviewers, considered specialists on the topic, were invited to these meetings to comment on drafts of two or three chapters.

Comments by different agencies and participating key actors were cited in confidential issues, given that the general aim of their contribution was to enrich the report. Comments by SEP agencies were cited with the initials SEP preceding the name of the Directorate, for example, the Directorate General of Policy Assessment was cited as (SEP-DGEP, 2010). Acronyms were used for agencies external to the SEP and interviewees were assigned a code for their educational responsibility: Educational Authority [AE], Representative of Professors [RP], Academy Member [UN], and Representative of Civil Society [SC].

The limitations of this report are derived from the methodology of work adjusted to the time and budget destined for its realisation. In the first place, information in the sections was dependent considerably on what was submitted by participating agencies, information offered by interviewees, internal documents to which access was possible, as well as information from only 15 states. In most cases, information was corroborated with other sources (i.e. protagonists, additional bibliography and official documents). However, in some cases, it was not possible because of the difficulty in accessing some recent or confidential unpublished documents.
Secondly, it was not possible to clarify controversial areas regarding assessment perspectives of the eleven interviewed protagonists. That was because each of them was considered a specialist in a chapter of the report. They were asked about different assessment factors and it was feasible to interview only a reduced number of them. Furthermore, though there are representatives from different assessment settings in Mexico, there are others that would be highly valuable if incorporated to the dialogue: parents, teachers, principals or principals of schools and supervisors, among others.

Lastly, there are more challenges than what were disclosed per chapter and an additional task was done to sustain challenges mentioned throughout this report with proposals.

Therefore, in future efforts, it would be advisable for Mexico to extend the range of key players, organise focus groups with interested representative audiences to clarify controversial areas, add gathering data methods to ease triangulation of information and report assessment efforts and practices of all the federal agencies. The aforementioned has the objective of continuing to enrich the Report of Basic Education Assessment Practices in Mexico, which is shown below and represents unprecedented work.

**STRUCTURE OF THE REPORT**

The Report of Basic Education Assessment Practices in Mexico has seven chapters, which describe the overview of the National Education System (SEN), the main proposals and current school assessment practices, teachers, students and education programmes for basic education in primary and lower secondary levels.

**Chapter I. National Education System** shows an overview of the Educational System in Mexico. First, it describes the context, structure and dimension of the current SEN, which are immediately followed by two highly relevant historic stages to consolidate it: The Post-Revolution Stage and Decentralization of the SEN. Secondly, it highlights current challenges in basic education in primary and lower secondary levels.

**Chapter II. Overview of Basic Education Assessment in Mexico** has a synthetic and updated perspective. Firstly, it goes through assessment practices on different components that give the SEN feedback and points of inflection on the development of educational assessment in the country from the 1970s to date. Secondly, it shows the normativity in effect, which regulates education assessment in Mexico and the agencies responsible for it. Thirdly, it approaches the three periods of diffusion and use of the results of said assessments, and lastly, the challenges and perspectives regarding assessment of basic education in Mexico.

**Chapter III. SEN Assessment Efforts: Information Systems and Large-Scale Assessment** shows current proposals and practices allowing systematic information to be obtained and integrated, which serve as input to assess the system and include information systems developed by the SEP and INEE, Educational Quality and Achievement (Excale) of the INEE and international assessments in which Mexico has participated. Secondly, it approaches the diffusion and use of results of said assessments. Thirdly, are the policy initiatives, and lastly, the challenges involved in these efforts.

**Chapter IV. School Assessment** sets forth, primarily, an overview of primary and lower secondary schools in Mexico, in terms of their structure, organisation, functioning and dimension. Secondly, it amply describes current proposals for school assessment in the country. Thirdly, it points out variations in the implementation and articulation of the results of these assessments, and then, the degree of diffusion and use of results. It carries on to indicate
policy initiatives launched to improve school assessment processes, and lastly, the challenges Mexico faces in school assessment.

Chapter V. Teacher Assessment starts out by giving an outline of the characteristics of primary and lower secondary teachers in Mexico, in terms of their initial training and classroom service and the teaching dimension. Secondly, it describes current practices in the country for teacher assessment according to their trajectory: initial education, entry to SEN service, in-service training, and for promotions and stimuli. Thirdly, it mentions variations in the implementation and articulation of results of the assessments, and then, the degree of diffusion and use of the results. It then indicates policy initiatives, and lastly, the challenges Mexico faces in respect to teacher assessment.

Chapter VI. Student Assessment: In and beyond the classroom describes, firstly, current assessment practices for basic education students in Mexico, at both a classroom level and beyond, for diagnosis, student entry selection and acknowledgment of students for their academic quality. Secondly, it points out variations in the implementation and articulation of the results of these assessments, and then, the degree of diffusion and use of its results. Thirdly, it points out policy initiatives, and finally, current challenges in the student-assessment setting.

Chapter VII. Other assessments. Federal education programmes focus on presenting assessments of the federal programmes of the education sector in Mexico. Firstly, it describes the characteristics of federal programmes that are in effect, as well as the assessment carried out to appraise their belonging, achievement of their objectives and other attributes. Secondly, it shows the assessment conducted on the Quality Schools Programme [PEC] as a representative case of said assessments.

The list of references is also included, as is a list of acronyms for institutions, programmes and terms, the glossary with 127 defined terms and 17 annexes, which together facilitate the understanding of basic education assessment in Mexico.

The list of references and reference citations in the text uses the American Psychological Association (APA, 2002) format as a base. References to the glossary are included throughout the report and identified with the superscript following the defined term. These references are added only the first time the word appears in the report. Annexes are presented sequentially by chapter.
CHAPTER I. THE NATIONAL EDUCATION SYSTEM

Mexico has a population of more than 100 million people concentrated in large cities but dispersed over an extensive territory. It has vast ethnic and linguistic diversity. This heterogeneity, derived from the development stages of the National Education System [SEN]. Below, is a description of the context structure and dimension of the current SEN, followed by two highly relevant historic stages for SEN consolidation: the Post-Revolutionary stage and SEN decentralisation. Secondly, current challenges of basic education in primary and lower secondary levels are highlighted.

1. THE CURRENT SEN: CONTEXT, STRUCTURE AND HISTORY

Mexico ranks eleventh among the most populated nations of the world with 107, 550, 697 inhabitants - 50.8% are women - distributed in 31 states and the Federal District (DF), of whom only one-third live in urban areas, while the rest inhabit small settlements and live in poverty (INEGI, 2009). Urban settings concentrate most of the economic growth by receiving high levels of industrial investment and services, while an economic structure at a standstill predominates in rural areas, based on the self consumption of agricultural production with an agricultural Gross Domestic Product [GDP] of 7.8% and the rest being industry, commerce and services (INEGI, 2010). In this context, the first enclave of poverty is in Oaxaca, Veracruz, Puebla, Guerrero and Chiapas, the second in Zacatecas, Durango and Chihuahua and the third in large cities.

The indigenous population is approximately 8 million, which represents 62 ethno-linguistic groups that speak one of the 68 indigenous languages and the 364 dialectic variations existing in the country. These communities show high and very high degrees of marginalisation, a fact related to geographic conditions, which hamper access and make it difficult for them to receive the education services needed for their development (INEE, 2004, 2005; OECD, 2004). Illiteracy at a national level has notable variations, for example, it is 1% in Baja California but reaches 18.9% in Chiapas (Presidency of the Republic, 2007). The country’s average education level or number of years of education is 8.3, which is equivalent to grade eight or the second year of lower secondary; 77% of the 5-year-old population and 97% of the 6 to 12-year-olds go to school, while 7.8% of those over 15 are illiterate (SEP, 2009).

In 1940, life expectancy was 39.8 years, and is currently more than 72 years, with a population growth of 1.2%. The average age of the Mexican population is 24 years of age (INEGI, 2005). One-third of this population is in the 0 to 14-year-old age range (29%), and around 21% are able to receive basic education. Therefore, the population pyramid starts to get broader in its mid-point, which derives in progressive stabilisation of the demand for this type of education. Currently, the greatest demand is concentrated in lower and upper secondary levels, with coverage as their priority.

Today, Mexico has five times more population than it did seven decades ago, most of it urban and with a greater life expectancy. The described and prevalent heterogeneity has an impact on educational services, making it difficult to outfit a large number of schools with basic equipment and the assurance that each of them has enough professional teachers, which determines the dynamic of current challenges faced by the SEN: equity and quality of the national education system.

All of Mexico’s inhabitants have a right to education, one of the individual rights bestowed by the Political Constitution from the start of the 20th century. The current SEN is sustained in Article 3 of the Constitution and the General Education Law [LGE] (see Annex A). According to this Law, the SEN is formed by: a) students and teachers, b) education authorities, c) the National Technical Council of Education and correspondents in federal entities, d) the plans, programmes, methods and education material, e) state education institutes and their decentralised agencies, f) private institutions with authorisation or official recognition of studies, and g) higher

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4 In 2008, 50.6 million Mexicans were asset-poor (47.4%) because of a lack of income to satisfy their needs for health services, education, food, dwelling and public transportation, even though they dedicated all their economic resources to those purposes. That means, on average, each of them had a monthly income of less than $1,905 pesos in urban areas and less than $1,282 pesos in rural areas. In the same manner, 19.5 million were food-poor (18.2%) for having insufficient income – a total monthly income per capita of less than $949 pesos in urban areas and $707 pesos in rural areas – to acquire basic food products, even if they were destined exclusively to that end. Six of every ten food-poor inhabitants live in the country’s rural settings (CONEVAL, 2009). For more details on poverty statistics in Mexico, please visit [http://www.coneval.gob.mx].

5 9.9% are in the under four-year-old group, 20.8% range from 5 to 14 years old, 9.8% are from 15 to 19 years old, 16.5% from 20 to 29 years old, 32.3% from 30 to 59 years old, 8% are 60 or older and 2.7% are not specified (INEGI, 2005).
education institutions [IES] to which the Law grants autonomy (Article 10, DOF, 22 June 2009). The current government has six\(^6\) education objectives, which has disincorporated and established goals for 2012 (SEP, 2007\(^d\)) (see Annex A).

The SEN is currently integrated by approximately 33 million students\(^d\), one and a half million teachers and 248 thousand schools (see Annex B). The SEN imparts three types of education: basic education\(^d\), upper secondary education\(^d\) and tertiary or higher education\(^d\), each with specific education levels and services, which promote the development of “skills to improve their way of life and acceptance in an increasingly more complex society...” (SEP, 2009\(^e\), p.11). Educational services are conferred in schooled modality\(^d\) (see Table 1), non-schooled modality\(^d\) and mixed modalities (Article 46, DOF, 22 June 2009\(^f\)). There are education services that are not compulsory or schooled, such as early childhood education\(^d\) and special education\(^d\) and in mixed mode, adult education\(^d\) and job training (Article 39, DOF, 22 June 2009) (see Annex B).

**Table 1. Schooled education structure**

<table>
<thead>
<tr>
<th>Education type</th>
<th>Level</th>
<th>Grades</th>
<th>Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic education</td>
<td>Preschool/ Pre-primary</td>
<td>3 years</td>
<td>General(^b), Indigenous(^b), Community(^b)</td>
</tr>
<tr>
<td></td>
<td>Primary</td>
<td>1° to 6</td>
<td>General, Indigenous, Community</td>
</tr>
<tr>
<td></td>
<td>Secondary</td>
<td>7° to 9</td>
<td>General, Technical, Televised Lower Secondary Distance Education, Technical training</td>
</tr>
<tr>
<td>Upper secondary</td>
<td>Technical</td>
<td>10° to 12</td>
<td>National College of Technical Professional Education [CONALEP], Technological Studies Centre [CET], others</td>
</tr>
<tr>
<td></td>
<td>High School</td>
<td>10° to 12</td>
<td>General(^b), Televised Upper Secondary Distance Education(^c), High School College(^c), Technological/ Vocational Upper Secondary Education(^d)</td>
</tr>
<tr>
<td>Higher education</td>
<td>Higher technical degree</td>
<td>Depending on the programme</td>
<td>Technological universities, others</td>
</tr>
<tr>
<td></td>
<td>Post graduate</td>
<td></td>
<td>University, Technological, Normal</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Specialisation, Masters, Doctorate</td>
</tr>
</tbody>
</table>

Source: Authors based on SEP (2009\(^f\)); Educational System of the United Mexican States: Main figures, 2008-2009 school term

Of the total SEN school registration or enrolment\(^d\), 75.9% is in basic education, 11.6% in upper secondary\(^d\), 8% in tertiary education, and 4.5% on-the-job training [SEP, 2009\(^d\)] (see Annex B).

Basic education\(^d\) is obligatory and comprised of three levels: pre-primary\(^d\) (18.1% of school registration), primary\(^d\) (57.9%) and lower secondary\(^d\) (24%) (SEP, 2009\(^f\)). These levels have services which adapt to the linguistic and cultural needs of the country’s indigenous groups, dispersed rural population and migrant groups (SEP, 2009\(^f\)) (see Table 2).

**Table 2. Basic education figures, 2008-2009 school year**

<table>
<thead>
<tr>
<th>Education level</th>
<th>Service</th>
<th>Students</th>
<th>Teachers</th>
<th>Schools</th>
<th>Groups</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preschool</td>
<td>General</td>
<td>4 099 655</td>
<td>183 018</td>
<td>60 882</td>
<td>29 631</td>
</tr>
<tr>
<td></td>
<td>Indigenous</td>
<td>383 006</td>
<td>17 035</td>
<td>9 468</td>
<td>19 045</td>
</tr>
<tr>
<td></td>
<td>Communitarian</td>
<td>151 751</td>
<td>18 153</td>
<td>19 045</td>
<td>268 068</td>
</tr>
<tr>
<td></td>
<td><strong>Subtotal</strong></td>
<td><strong>4 634 412</strong></td>
<td><strong>218 206</strong></td>
<td><strong>89 395</strong></td>
<td><strong>634 555</strong></td>
</tr>
<tr>
<td>Primary</td>
<td>General</td>
<td>13 865 443</td>
<td>520 178</td>
<td>77 470</td>
<td>64 053</td>
</tr>
<tr>
<td></td>
<td>Indigenous</td>
<td>841 151</td>
<td>36 105</td>
<td>9 918</td>
<td>45 939</td>
</tr>
<tr>
<td></td>
<td>Communitarian</td>
<td>109 141</td>
<td>12 469</td>
<td>11 187</td>
<td>744 547</td>
</tr>
</tbody>
</table>

\(^6\) These six objectives are: 1) Raise the quality of education so students improve their education achievement level, have the means to access greater wellbeing and contribute to national development; 2) Extend educational opportunities to reduce inequality among social groups, close gaps and promote equity; 3) Promote development and utilization of information technologies and communication in the SEN to support students’ learning, amplify their skills for life, favouring their insertion to the society of knowledge; 4) Offer integral education to balance the formation of civic values, development of skills and acquisition of knowledge through regular classroom activities, the teaching practice and institutional setting to strengthen democratic and intercultural coexistence; 5) Offer quality educational services to form individuals with greater social responsibility, who take part in the labour market in a competitive and productive manner; and 6) Foster scholastic and institutional management, which strengthens participation of schools in decision-making, giving rise to the co-responsibility of different social and education actors, and promoting the safety of students and teachers, transparency and accountability. For more details on indicators and goals established for 2012, see Annex A and SEP (2007\(^d\)).

\(^7\) The scholezed modality has the most coverage and students attend a campus to cover a study programme in accordance with a previously defined official calendar. Non-scholezed and mixed modalities refer to open or distance learning with students being present or partially present and these modalities adapt to the users’ needs and functions with the support of consultants (SEP, 2009\(^f\)).
There are three years of pre-primary education. The first is for three year-olds, the second for four year-olds and the third for five year-olds. This level has been obligatory since 2002. Its objective is to contribute to integral formation and guarantee the participation in education experiences that allow the development of priority, affective, social and cognitive skills in the following formative fields: personal and social development, language and communication, mathematical thinking, exploration and knowledge of the world, artistic appreciation and expression, and physical development and health (SEP, 2004). At a national level, there are 4,634,412 students, 218,206 teachers and 89,395 schools (SEP, 2009c). The current coverage is 78%. It is now regulated by the Pre-primary Education Programme [PEP] of 2004 (see Annex C).

Primary education has six grades for children six years of age to adolescents less than 15 years of age, and upon conclusion, they receive an official diploma, which is an indispensable requisite for entering lower secondary education. This level has been obligatory since 1917. Its objective is to offer and develop skills that students need for their personal, social, scientific, civic and artistic education. At a national level, there are 14,815,735 students enrolled, 568,752 teachers and 98,575 schools (SEP, 2009c). Of the students, 93.4% study in general primary schools (urban and rural zones), 5.6% in indigenous schools (bilingual-bicultural) and 1% are in community courses (small communities). Of the schools, 78.5% are general primary, 10.1% are indigenous and 11.4% are community school classrooms of the National Council for Educational Promotion [CONAFE]. One-half of the indigenous primary schools and at least three-quarters of the community courses are in rural areas (INEE, 2005c). Of all the primary schools, 44% are multi-grade — and all the community courses, approximately 6 thousand indigenous primary schools and 25 thousand general primary schools, which serve 9.5% of this level’s school enrolment (INEE, 2006a, 2008; SEP, 2009c).

This is the most stable and consistent of all levels of education with coverage of 97%, terminal efficiency of 93.8%, a dropout or desertion rate of 1.1%, and a failure index of 3.8% (Presidency of the Republic, 2007-2009). It is currently regulated by the 2009 study plan and programmes (see Annex C), and adjustments or services are added in accordance with the location of the school.

Lower secondary has three grades for 13 to 15 year-olds and is accredited with an official diploma, which is a requisite for enrolment in upper secondary education. This level has been obligatory since 1992. Its objective is the acquisition of knowledge, development of skills, building of values and attitudes, and formation in skills from the pluricultural national context and specificity of each regional, state and community context (SEP, 2006c). At a national level, there are 6,153,459 students, 369,548 teachers and 34,380 schools (SEP, 2009c). Of the students, 50.7% study in general lower secondary schools, 28.1% in technical lower secondary schools, 20.2% in televised lower secondary distance education and 1% are in schools for workers. This level has 95.2% coverage, a terminal efficiency of 80.9%, a dropout rate of 6.8%, and a failure index of 15.5% (Presidency of the Republic, 2009). The Lower Secondary Education Reform [RES], which promotes the consolidation of basic life skills (see Annex C) is derived from the current study plan and programmes of 2006.

Upper secondary education includes high school and technical education. High school has two and four-year study programmes and a graduation diploma is required for entry to tertiary education. Technical professional education has two to five-year programmes, and forms part of technical work, which is why they are of a terminal nature. However, there are institutions with programmes offering a high school diploma through the accreditation of additional subjects. Enrolment at a national level is 3,556,858 students, 243,855 teachers and 12,677 schools. Professional technical education has an enrolment of 366,964 students, 28,962 teachers and 1,426 schools (SEP, 2009c). This level has a termination index of 61.7% for high school, 46% for professional technical education, a

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1 For more details on the PEP, please visit http://www.reformapreescolar.sep.gob.mx
2 Teachers instruct more than two grades simultaneously. For more details on multi-grade schools, see Chapter 4 and please visit http://basica.sep.gob.mx/dgdyer/cva/site/start.php?act=multigrado
dropout rate of 15.7% and a failure index of 33.3% (Presidency of the Republic, 2009). Currently, the Comprehensive Reform of Upper Secondary Education [RIEMS]\textsuperscript{10} attempts to offset difficulties with the existence of 300 study programmes of this education level.

Tertiary education has three levels: the higher technician level\textsuperscript{11} or associate professional, university bachelor’s degree\textsuperscript{12}, and postgraduate degree\textsuperscript{13}. The higher technician level requires high school studies and trains technical professionals for work in a specific discipline. Its study programmes are two years. It is of a terminal nature and does not reach a degree level. Three types of degrees are granted: a technological bachelors degree\textsuperscript{14}, university bachelor’s degree\textsuperscript{15} and teacher training or normal education\textsuperscript{16}. It is of a terminal nature and educates professionals in different areas with study programmes of four or more years. Entry to post-graduate studies requires a bachelor’s degree and is divided into specialization\textsuperscript{17} studies, master’s degree\textsuperscript{18} and doctorates\textsuperscript{19}. It forms highly specialised professionals, who are accredited with a bachelor’s degree (SEP, 2009). At a national level, there is an enrolment of 2,705,190 students — 3.4% in the higher technician level, 89.8% are undergraduates\textsuperscript{20} and 6.8% are in postgraduate studies\textsuperscript{21} — 283,818 professors, and 4,228 schools. Coverage is 27.6% of the 19 to 23 year-old age group, which has a termination index of 50% (Presidency of the Republic, 2009)\textsuperscript{22}.

Below, are two historical stages relevant for SEN consolidation.

**Post-revolutionary Stage**

Article 3 of the Political Constitution of the United Mexican States of 1917 states that education was considered an individual guarantee, establishing that it was free, lay and obligatory only in the primary level (CPEUM, 1917)\textsuperscript{23}. Since then, this Article has been the legal, political and philosophical basis of SEN development.

In 1921, the Secretariat of Public Education [SEP] was created as an agency with jurisdiction in national territory, focusing its function on expanding education services throughout the country and having central control under the supposition that education is training, not instruction\textsuperscript{24}. The federal government, through the SEP, absorbed municipal schools first and went on to absorb state schools. This process grew more intense in the 1930s and the SEP assumed all responsibility for the SEN, while states were involved only in operating urban schools. At that time, the literacy index was only 15%, hence a minimum number of bases needed to be put in place to construct a nation, for which rural education arose as support in the universalisation of education.

From 1920 to 1940, SEN expansion and diversification were linked basically to primary education but there was also a boom in higher education. Professors played an important role in the consolidation of the education project and post-revolutionary regimens. In 1938, the proclamation of state workers’ legal status gave place to the possibility of organising a single union, which would consolidate the different labour unions - missionaries, rural and urban\textsuperscript{25} — dependent on the SEP. In 1943, the National Teachers Union [SNTE] was formed as the teachers’ titular organisation\textsuperscript{26}.

In 1959, the Eleven-year Plan was created with the aim of improving and universalising primary education, and along with it, creation of the Free Textbook Commission as a State education policy, which is still in effect. In the 1960s, rural normal schools with boarding services were abolished and the Normal Education Regional Centres [CREM] created with an outline similar to that of current normal schools in charge of teacher training.

\textsuperscript{10} For more details on RIEMS, please visit http://www.sems.gob.mx/aspnv/homesems.asp

\textsuperscript{11} Of the undergraduate level, 94.6% are in university or technological levels and 5.4% are in normal education. School enrolment by area of learning in university service is 46.3% in Social and Administrative Sciences, 33.2% in Engineering and Technology, 9.4% in Sciences of Health, 6.4% in Education and Humanities, 2.5% in Agriculture and 2.1% in Exact and Natural Sciences (Presidency of the Republic, 2009).

\textsuperscript{12} Of the post-graduate level, 21.5% are in specialization, 68.6% in masters, and 9.9% in post-graduate courses.

\textsuperscript{13} For more details on tertiary education, please visit http://ees4.sep.gob.mx/index.jsp

\textsuperscript{14} For more details on the right to education from the Mexican perspective, see INER (2009) and Latapi (2009).

\textsuperscript{15} For more details on the education federalisation process in Mexico, see Arnaut (1998) and Loyo (1999).

\textsuperscript{16} Urban teachers were the only ones educated in state normal schools, which started up at the end of the 19th century.

\textsuperscript{17} National Unity took place at that time, which facilitated the creation of the SNTE with a good deal of visibility in national policy. This Unity was constituted by the National Confederation of Popular Organisations, to which the National Peasant Confederation and Workers’ Centrals belonged, which is why the SNTE has two functions since that time: to defend education workers’ rights and a political function. For more details on the creation and consolidation of the SNTE, see Arnaut (1997). Currently, the SNTE is not a monolithic structure, given that there are more or less dominant and hegemonic movements in it, depending on the region and different local situations, as well as the relationships and power structure inside federal entities. However, most Mexican teachers and personnel that support basic and normal education, more than one million, are affiliated to the SNTE (Fierro, Tapia and Rojo, 2009).
Accelerated demographic growth from the 1940s to the 1970s, when the Mexican population rose from 19.6 million to 48.3 million with an annual growth rate of 3.5% (INEGI, 1970) represented the need of the SEN to prioritise coverage as an objective of education policy. As a consequence, new education services emerged to attend the most remote and impoverished localities: indigenous, bilingual and bicultural education in primary schools, as well as CONAFE community courses, which is a government agency created in 1971. Televised distance education services in lower secondary school, initiated in 196818. This period’s priorities were to accelerate quantitative SEN growth, update education content, strengthen technological education and extend the offer for education through open systems.

Therefore, the SEP was restructured, based on the Federal Education Law of 1973, and from 1978, its respective areas in states were strengthened. This administrative action increased SEP control of preschool, primary and lower secondary services and teacher education19 (Zorrilla and Barba, 2006). The aforementioned took place at the same time as work at the federal level was reorganised in the planning and service programming setting, incorporating the use of formal methods and technologies for data gathering.

There were changes in challenges to the education policy regarding quality and equity topics at a world level during the eighties. These topics became priorities in Mexico, even though education results for students obtained through informal learning assessments20 and retention rates21 showed that it was not enough to merely open schools and train teachers for progress to be made in quality and equity (SEP, 20094).

In 1983, the Planning Law [LP]19 was decreed, which obliged the federal executive power to have a National Development Plan [PND] accompanied by Sectoral Programmes, including plans of action and objectives, from which specific intervention plans emerged for the constitutional governmental period when they were approved. However, in some cases, the previsions and projections had a longer term (Article 22, DOF, 13 June 2003). Since then, these intervention programmes have been part of the SEN and offer an overview of public policies, allowing the fulfilment of PND purposes.

At the start of the 1990s, centralisation faced clear challenges: the country was in throes of a profound economic and institutional reform, which included the signing of the North American Free Trade Agreement [TLC], the strengthening of state regulatory functions in detriment of its productive functions, and for the first time in the political setting, a state government from another party emerged, the number of opposing municipalities increased four-fold, and wear and tear on the centralised management scheme was evident (Pardo, 1999), which is why education decentralisation became an option and growing demand.

**SEN decentralisation**

In 1992, there was a decentralising federalisation process. In the context of State reform and accelerated changes in the economy and institutional framework undertaken by Mexico, the federal government, the SNTE and state governors signed the National Agreement for the Modernisation of Basic Education [ANMEB] (SEP, 1992). This political agreement transferred operation of basic education to state governments: preschool, primary and lower secondary, initial and in-service teacher training, and with that, the possibility of rebuilding a State Education System20. The SEP reserved the normative faculties that assured uniformity of these services throughout the country, which guaranteed the national character of the SEN. The SNTE retained the ownership of representation and labour relationship with the SEP (Fierro, Tapia and Rojo, 2009). The ANMEB, known as the “Agreement of the three R’s” established three extensive policy lines with the purpose of promoting quality basic education with equity for all: Reorganisation of the SEN, Reformulation of education content and material, and Reassessment of the teaching function21.

Legal implications of the ANMEB were the reform to Article 3 of the Constitution, establishing basic education as preschool, primary and lower secondary, and incorporating lower secondary education as obligatory, which

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18 Secondary education services, which started up in 1968 in rural, marginalised, or difficult to access areas with few primary school graduates. For more details on this educational service, see http://telesecundaria.dgme.sep.gob.mx/
20 For more details on the State Education System, see Cabrero (1998).
21 For more information on the ANMEB, see Arnaut (1998), Omelas (2009), SEP (1992), and Zorrilla and Barba (2006).
increased the responsibility of the federation and states in charge of offering the service to children and adolescents from five to fourteen years of age. In 1993, and in tune with this Agreement, the Congress made the General Education Law [LGE] public, which distributed the educational social function in the three government areas (Articles 12 to 15, DOF, 22 June of 2009); strengthened the federal executive role in the field of substantive decisions: normative faculties, of financing, assessment and administration of personnel to handle and manage the SEN. It officialised agreements on decentralisation of the move proposed in the ANMEB (see Annex A).

Promotion of new redistribution schemes for federal resources and assignment of amounts also had financial drawbacks. Furthermore, states developed their State Development Plan, and as the federal government was in control of it, the possibility for assessment opened up as a real SEN activity, or the reforming of curricula and education methods and reassessment of teachers. In 1993, new Study Plans and Programmes were developed for primary and lower secondary levels. Lastly, the idea of diversity became evident, which is why the SEP initiated a compensatory function between states and regions by assigning larger resources to the entities lagging the farthest behind in education by means of the design and operation of special programmes called “compensatory programmes” for which the CONAFE was in charge.

It became apparent in 2000, with political alternation of the federal government in the country, that new institutional co-ordination spaces were needed between the federal government and states. In 2004, the National Council of Education Authorities [CONAEDU] was created as a collegiate body to determine the main guidelines for implementation of national education policies.

Political alternation was also translated as the emerging of new social players and others became more visible in the SEN state governments, federal and state education bureaucracies, social organisations and the productive sector, parents and their groups, the teachers’ trade organisation at a national level and its sections in each of the states, teachers and principals, and the protagonist: the student (Zorilla and Barba, 2006). With this context, the Social Commitment for Quality Education emerged in 2002 which promotes the inclusion of protagonists other than the SEP and SNTE in the education sector. That same year, the National Institute for Education Assessment and Evaluation [INEE] was created as an institution with high technical quality, which shares the responsibility for assessment with the Directorate General of Policy Assessment [DGEF] of the SEP.

The Council of Education Specialists was created in 2005 as a consulting agency for planning and designing education policy issues. Furthermore, the Senate and Congressional Education Commissions, with a more pluralised plan, initiated the participation of Social Organisations as observers of education actions. During this period, the SEP was restructured into three sub-secretariats: basic education, secondary education and tertiary education. Education services for the Federal District were decentralised and areas and functions were redistributed without modifying SEP bureaucracy (see Annex D). The last reform to Article 3 of the Constitution was made in 2002, which made preschool education obligatory and the new Preschool Education Programme took effect in 2004.

In 2007, during the current administration, new protagonists were recognized in the National Development Plan 2007-2012 and Education Sector Programme 2007-2012 [PROSEDU] (see Annex A) belonging to the social development policy. In 2008, the federal government and the SNTE signed the Alliance for the Quality of Education [ACE] with the aim of promoting a transformation in the quality of SEN education specifically on ten processes: 1) Infrastructure and equipment; 2) Information and communication technologies; 3) Social management and participation to promote the Councils of Social Participation to strengthen schools and position

[22] Services were not decentralised in the Federal District.

[23] The CONAEDU is formed by the Secretariats of Education from each of the states, as well as educational authorities of the federal government. Its objectives are to ensure that the Third Constitutional Article is observed, assist the SEP and State Education Secretariats in the organisation and functioning of educational systems, propitiating their correct planning and assessment and supporting national and state educational authorities to continue and probe decentralisation processes. acting as a consultation mechanism for federal policies and programmes with local governments to guarantee their correct implementation.

[24] The decentralised agency of the SEP created in 2005 was the Federal Administration of Educational Services in the Federal District. The Federal District is included when speaking of “federal entities”, for a total of 32, and when speaking of “states”, it is excluded since it hosts federal powers and is the political and economic centre of Mexico.

[25] The link between education and social development is not explicit in the Planning Law (DOF, 20 January 2004) and in the last four PND. Education, health, the combat against poverty, environment, indigenous and agricultural issues have been viewed as part of social development. This new social development conceptualisation allows follow-up and assessment of the results of federal programmes on the education sector through the National Council for the Evaluation of Social Development Policy [CONEVAL], an agency created in 2007.

[26] For more details on the ACE, please visit http://alianza.sep.gob.mx.
them in the centre of the NES, 4) Teacher enrolment and promotion; 5) Professionalization of teachers; 6) Incentives and stimuli for teachers, 7) Health, food and nutrition, 8) Social conditions to improve access, permanence and graduation rate; 9) Curricular reform; and 10) Assessment, promoting consolidation of a National System for Education Assessment [SNIEE] (Federal Government of the United Mexican States, 2008). In 2009, the current Study Plan and Programmes for primary education took effect.

2. SEN CHALLENGES

Throughout the 20th century, and to date, the SEN has been constituted as a large system with great social and educational diversity. SEN challenges in basic education are centred on both coverage and the equity and pertinence of its services, which requires the generation and implementation of diverse solutions in order to offer quality education and contribute to the integral development of a population in the throes of change. These challenges are particularly true in the most remote communities of the country, where lower quality education is offered. Main challenges in the primary level are education equity and quality, and in the lower secondary level, coverage, quality and equity in the most relegated entities and regions, as well as the most vulnerable groups, among other challenges.

Firstly, consider targeted policies so education services offered in communities with the most needs allow the average scholastic level in Mexico to rise, which is lower than the second year of lower secondary education, and it that manner, reduce failure and dropout indexes (AEM09; AEP07).

Secondly, give more value to the school as a real setting for the execution of education policies and good education practice in the classroom. In that sense, the core of the SEN should be the school, by being the place where all elements making up the education system interact: students, teachers, education authorities, plans, programmes, methods and common goals of a culture and academic leadership inside schools [AEA08; AEM09; AEP07; SCD04; UNS01].

Thirdly, it would be wise to promote a more symmetrical relationship between federal and state governments in respect to the design and implementation of education policies and programs, as well as toward accountability and transparency [AEA08; AEM09; AEP07]. There is also a stronger link to other protagonists in society who contribute more to understanding the current education situation better and to fulfilling education goals, better comprehension of the current basic education situation and more participation to fulfil education goals, such as Civil Society Organisations, the Academy and families (AEM09; AEP07; UNA03).

Fourthly, reassess and reorient the image of teachers, so they can face challenges of the 21st century with pedagogical tools, material resources and the conditions needed for their work with the support of society. The worth of an education system has quality teachers as its apex, which is why good candidates should be recruited, and selected carefully from the start, offering them appealing salaries and implementing strategies to foment the profession’s prestige (Barber and Moursesh, 2008). That implies improving the conditions of initial teacher training and professionalising the service (AEP05; AEM06; RPJ10; RPS11; UNA03; UNS01). Officials in entities should also receive better training in order to create professional groups with a social, critical and innovating commitment allowing specific education needs to be addressed in each locality [AEA08; AEM09; AEP07].

Finally, attain acceptable profiles needed for the specialisation of teachers. It is important to promote teacher specialisation in areas attended by professors with general profiles, such as multi-grade organisations, communitarian courses, or a population with special education needs. There should also be greater synchronisation between the implementation of reforms and the teacher’s graduate profile to prevent teachers from entering the classroom unprepared to face new challenges (AEP05; AEM06; UNA03).

27 The magnitude of the effort to achieve total coverage in basic education becomes obvious when the growth in public spending on education and federal goals for 2012 are seen – a coverage for education of 99% in basic education, 68% in upper secondary education and 30% in tertiary education — (SEP, 2007).
CHAPTER II. OVERVIEW OF BASIC EDUCATION ASSESSMENT IN MEXICO

This chapter has a synthetic, updated overview of basic education assessment in Mexico. Firstly, assessments practices of different components of basic education created in Mexico are pointed out, which have allowed students’ learning, teachers’ work, and schools and programmes to be assessed, contributing information for feedback to the SEN. Furthermore, main points of inflection are mentioned, which have constituted development of the country’s education assessment from the 1970s to date. Secondly, current regulations are expressed, which govern assessment in Mexico and the agencies responsible for it. Thirdly, three periods of diffusion and the use of results of said assessments, and lastly, the challenges and perspectives of basic education assessment in Mexico.

1. HISTORICAL BACKGROUND

The assessment of different components of primary and lower secondary levels of basic education in Mexico has developed in the past four decades, which can be characterised in three stages or periods: the first covers from 1970 to 1980, the second is the decade of the 90s, and the third is from 2000 to the present time. In continuation, each of these stages is described, pointing out the main points of inflection that have reoriented policies and practices in educational assessment (see Annex E).

The seventies and eighties

Prior to 1970, education policy efforts were directed to coverage. From 1970, the SEP started a reform with the aim of consolidating the integration of SEN components, which implies the recognition and conceptualisation of planning and assessment as technical procedures to propitiate improvement of the SEN. This promoted the collection, systematisation and updating of census figures to create SEN statistics through the Directorate General of Planning — known currently as the Directorate General of Planning and Programming (DGPP). This effort became a national catalogue of schools, school registration in the country and initiation of the creation of national statistics on education indicators: school enrolment, coverage, school completion index, lagging behind and dropping out. The result of this process was the creation of statistical yearbooks and special reports.

In 1972, the Department of Qualitative Education Studies was created, which applied an aptitude test to students who had completed primary school in the metropolitan area of Mexico City (SEP-DGE, 2002). In 1974, this Department became the Assessment and Accreditation Branch attached to the Directorate General of Educational Planning and coordinated the first assessment study with national coverage: the Secondary School Entrance Exam. Nevertheless, since the evaluations were graded in schools, their results were not integrated at a national level or taken into consideration for decision-making. In 1973, new regulations were established for the Vertical Promotion System [EV] for salary increases and promotions for in service teachers.

From 1976 to 1982, education assessment went through its first consolidation stage by designating resources to the area responsible for assessment, which allowed the first assessment to be conducted with the aim of accrediting studies done in Open Education Systems - primary, lower secondary and upper secondary - as well as the first test on school performance of grades 4 and 5 primary school students, with national representation (SEP, 2009).

One of the objectives established in the Education Development Programme published in 1983 was to develop an integral model to substantially improve criteria and procedures to assess of education services and the entire system. To that end, the Assessment and Accreditation Branch reorganised its functions, becoming the Directorate General of Assessment [DGE] and specified its intervention in basic and normal education subsystems. The first assessments in the basic education setting took place in the third year of preschool to the third year of lower secondary. The Normal Education Entrance Exam [EIEEN] was applied at a national level to select applicants to normal schools sustained by the federal government, as was the opposition exam for graduates of state normal schools who aspired to the granting of a federal position (SEP-DGE, 2002). However, normal school graduates had automatic access to a position in some states (AEM09; RPJ10).

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28 Information in this section was obtained by consulting the following references: Backhoff and Diaz (2005), Banegas and Blanco (2005), INEE (2004, 2006, 2006'), Martínez Rizo (2008'), SEP-DGE (2002) and SEP (2009') as well as specific references cited in the corresponding sections.

29 The first was Education Planning. From 1985, the Directorate General of Programming, later known as the Directorate General of Planning, Programming and Budget [DGPPP], and currently the Directorate General of Planning and Programming [DGPP].
In 1987, there was a notable drop in the demand to enter normal school, which brought about the decision to reorient the EIEN proposal and create a diagnostic tool on applicants’ aptitudes. In 1989, the test was called Diagnosis and Classification Instrument for Normal School Enrolment [IDCIENT], and systematic application of the Instrument for Testing New Lower Secondary School Students [IDANIS], directed to grade 6 primary students with the aim of appraising their basic aptitudes in verbal expression, mathematics and reasoning (SEP-DGE, 1999, 2001).

These first assessment practices responded to the priority education policy of the time, related to obtaining systematic information on the SEN, diagnosing students’ level of learning, strengthening normal education and granting federal positions prioritising teachers’ academic merits. However, from 1982 to 1988, the assessment presented diverse factors that were unfavourable to its development, diversification and increase in assessment projects, with an absence of guidelines to diffuse its results. Reports were prepared and based more on methodological aspects than an analysis of results. The aforementioned resulted in infrequent assessment of teaching processes because it was transmitted to a limited number of users (SEP, 2009b).

The nineties

The nineties had significant changes in respect to the previous decade. In the first place, the Programme for Education Modernisation (1989-1994) demonstrated that assessment practices done to date were merely descriptive, not distributed, and that many existing education services were not assessed. Because of that, conditions of schools were probed by means of data gathering formats for the full understanding of what was occurring in each school. Another outstanding fact was the promotion of compensatory programmes directed to basic education. In 1991, the federal government, with the support of the World Bank, promoted the Program to Reduce Educational Lag [PARE], by the CONAFE in order to improve the quality of schools in the four states with the highest level of marginalisation. This programme required the assessment of results of students’ learning and aptitudes.

In 1992, with the signing of the ANMEB, SEN assessment took on special relevance because the federalisation process needed systematic follow-up to appraise how education programmes and systems worked in the country (Martinez. 2000; SEP-DGE, 2002). Furthermore, the LGE established that the SEN assessment was the responsibility of the SEP and had to be systematic, permanent, contribute to decision-making by education authorities, and distributed among different protagonists in the system, families and the public. State education authorities would conduct their own assessments and coordinate efforts with the federal SEP (DOF, 22 June 2009).

The National Teaching Career Programme [PNCM], created in 1992, was the first systematic assessment experience of basic education teachers in Mexico, by including a wage increase system based on results of an assessment focused on main aspects of teachers’ performance, professional preparation and student achievement — professional preparation and achievement. This voluntary participation programme was implemented in 1993.

In that same period, an assessment study and follow-up on Normal Education graduates was conducted to show the contrast in academic performance of normal school students’ teaching skills when working in a group setting. Other programmes were also proposed that contemplated student assessment. In 1993, the DGE reformulated the Children's Knowledge Olympics [OC] programme at a national level with the aim of appraising and acknowledging the academic preparation of outstanding students completing their primary education. In 1994, with the experience of the Programme to Reduce Lag in Basic Education [PARE] was created, in the framework of which the Primary Education Assessment Programme [EVEP] was developed to obtain information on students’ aptitude levels in Spanish and Mathematics in grades 3 to 6 of primary education in all entities of the country. This programme was applied from 1996 to 2000 and was the first attempt for exhaustive assessment of students’ learning.

Secretarial Agreement 200 was signed on classroom assessment issues, for which assessment norms for primary, lower secondary and normal education were established. Specifically, provisions were presented regarding the grade scale, assessment frequency, communication of results to teachers and parents, and the pass/fail criteria, depending on the grade (DOF, 19 September 1994). The National Assessment Centre for Higher Education

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30 It has had different names over the years: “Route of the Independence”, National Contest for Acknowledgement of Excellence in Grade Six of Primary Education”, and since 1993, “Children’s Knowledge Olympiad”.
Report of Basic Education Assessment Practices in Mexico, 2010

[CENEVAL] was created in the private initiative sector that same year as a civil non-profit association whose main activity was to design and apply assessment tools to diagnose, select and accredit students in upper secondary and tertiary levels at the request of interested education institutions. It also collaborates with the SEP in the preparation of entrance exams, and the diagnosis and accreditation of basic education students and teachers.\(^{31}\)

The education assessment policy continued from 1994 to 2000. The Education Development Programme 1995-2000 established the lack of sufficient, useful instruments to systematically assess scholastic achievement, adequate politics and decisions on the results. The indicators were not enough for complete, systematic assessment of the SEN education quality and there was no assessment system to report periodical information, which is why a SNNE was created to measure education results and reinforce efficiency, equity and indicators. With these policies, the DGE took on a starring role in the design and coordination of multiple assessments.

Three qualitative studies were conducted in primary and lower secondary schools during this period. The first was focused on identifying factors associated to student performance. The second was to detect the impact of some resources and strategies directed to teachers — economic incentives for it to take root in the community, start training and for the didactical material delivered — as components of the aforementioned compensatory programmes. The third was to know which factors had an influence on schools and showed improvements or reductions in annual follow-up of students’ results. Since 1997, and at an operation level, an important methodological advance for these studies was participation of State Assessment Areas [AEE] to be in charge of federal and state assessments, as well as the creation of the Interstate Technical Assessment Committee.

National Standard Tests were prepared in 1996 in the framework of the reform on Study Plans and Programmes for primary and lower secondary education of 1993, with the aim of knowing the grade in which students achieved minimum standards proposed in official Spanish and Mathematics programmes. The DGE was in charge of preparing these tests and designing assessment mechanisms between 1998 and 2003. These tests were applied yearly between 1998 and 2004 to a national student sample from primary grades three, five and six, and to three lower secondary grades since 2000.

National Continuous Training Exams for In-service Teachers [ENAMS] were given for the first time in 1997, with a formative aim and voluntary character allowing the detection of niches of opportunity for teachers to take actions, improve their skills and strengthen their mastery of more difficult content (SEP-DGFCS, 2010). Mexico’s participation in international projects also started in this decade because of the interest in having external reference of students’ academic achievement level to orient national and state assessment processes and make decisions to correct deficiencies found. In 1994, Mexico entered the Organisation for Economic Cooperation and Development [OECD] and joined three international education assessment projects: in 1995 and 2000, the Trends in International Mathematics and Science Survey [TIMSS] of the International Association for the Evaluation of Educational Achievement [IEA]; in 1996, the Regional Comparative Study of the Latin American Laboratory for Assessment of the Quality of Education [LLECE] of the Regional Bureau for Education in Latin America and the Caribbean [OREALC] of the United Nations Educational, Scientific and Cultural Organization [UNESCO]; and in 1997, the Programme for International Student Assessment [PISA] of the OECD.

Advances in education assessment in this decade are characterised by the establishment of an education policy for assessment issues; the emphasis with which the programmes were accompanied by an assessment for accountability, the granting of acknowledgements and assessment of results, establishment of the legal assessment framework in the LGE and bases for student assessment in the classroom, Mexico’s participation in international assessment and the strengthening of the agency responsible for assessment in the SEP.

From 2000 to date

In 2000, education policy conferred a strategic role on assessment as an indispensable tool for planning, follow up and accountability of education authorities, for which assessment was recognised as a basic instrument in the

\(^{31}\) The CENEVAL collaborates with the SEP in design and application. For teachers, in the General and Intermediate Knowledge Exams, the General Examination for Bachelor’s Degree Graduation [EGEB] for professors and other elements forming part of the INCM, and for secondary students, exams for 1) selection: National Upper Secondary Education Entrance Exam [EXANI-1] and the Competition Test for Admission to Higher Education in the Mexico City Metropolitan Area [COMPEN]; 2) diagnosis: Prognostic EXANI-1 [PREXANI] Examination; and 3) accreditation: Lower Secondary School Graduation Exam[EGRES] TEST for Accreditation of Knowledge Equivalent to Lower Secondary Education [ACREDITA-SEC]. The last two are directed to population who no longer attend school but are in need of accrediting their knowledge to obtain their lower secondary education diploma.
National Education Programme 2001-2006 to promote equity by detecting unequal SEN quality in all aspects and types of education. In that sense, it was affirmed that assessment should be permanent and systematic, combining the participation of internal and external agencies, and be an important management tool to effect improvement actions and accountability to society. Furthermore, it was pointed out that an authentic SNEE [SEP, 2001] could still not be talked about even though there were institutions and mechanisms dedicated to assessment in all types of education, and that collaboration among those responsible for assessment in federal entities had started. Therefore, precise elements for the integration of a group of mechanisms for a true and robust SNEE, including the creation of a new, specialised agency were proposed.

In this context, in 2001, federal programmes were created and directed to improving schools, such as the Quality Schools Programme [PEC], which started with an assessment. Furthermore, in the institutional setting, agencies responsible for assessment were restructured and, in 2002, by presidential decree, the INEE was created as a public, decentralised agency whose objective was to offer ideal tools to education authorities for assessing elements integrating their corresponding education systems in all levels of basic and upper secondary education in all their modalities (DOF, 8 August, 2002). To that end, the DGE changed its name to DGEP, and modified its attributions to refine and expand assessment work and reorient its function toward the development of systems to assess strategic SEN programmes and policies jointly.

In 2003, the INEE took charge of the National Standards Tests, but by trying to improve the quality of these instruments, their analysis derived in the development of a new generation of tests called, Educational Quality and Achievement Tests [Excale].

Since then, the DGEP and INEE have worked independently in the preparation of self-assessment proposals in basic education schools for their voluntary use by schools, and the INEE has conducted studies on their performance. The DGEP has proposed different initiatives, which have implicated the active participation of schools and involvement of other education protagonists, such as state education authorities and the AEE.

In 2005, the SEP created the Educational Policy Planning and Assessment Unit [UPEPE], formerly the Undersecretariat of Planning and Coordination, in order to develop and coordinate education assessment, of which the DGEP forms part. Furthermore, in that period, the federal government published the General Law of Social Development (DOF, 20 January, 2004), which establishes the creation of the National Council for the Evaluation of Social Development Policy [CONEVAL], and since 2007, the Annual Assessment of Federal Programmes for Public Administration.

In 2006, at a national level and for the first time, the National Assessment of Academic Achievement in Schools [ENLACE] was applied and repeated yearly since then with the aim of obtaining diagnostic census information on students’ academic achievement level in current study plans and programmes. The target population includes primary grades 3 to 6 students, and the three lower secondary grades — from 2006 to 2008, it was applied to students in grades 3 and 6 of primary and the third year of lower secondary education. In 2009, it included the first two years of lower secondary education — and upper secondary was added in 2008. Grades 1 and 2 will soon be added to the list. The results of this assessment are well diffused. In the same year, the SEP and INEE published a proposal, the Education Indicators System of the United Mexican States (SEP and INEE, 2006) in response to what was proposed in the National Education Programme 2001-2006.

The government’s current education policy is outlined in the National Development Plan 2007-2012, the Education Sector Programme [PROSEDU] 2007-2012 and the ACE political agreement. The PND 2007-2012 objective 9, axis 3, Equal Opportunities, establishes that in order to raise education quality, systematic assessment mechanisms of results of students’ learning and performance of teachers, administrative staff, supervisors and heads of sector, and teaching and management processes throughout the SEN must be proposed. In agreement, the PROSEDU 2007-2012, establishes that assessment is a basic tool in analysing the quality, and pertinence of the design and operation of public education policies. One of the programme’s transverse topics is “Assessment”, whose aim is to adjust and orchestrate the SNEE, making it become input for decision-making processes in the SEN

32 In 1989, it was renamed as the Directorate General of Assessment, Incorporation and Revalidation, and 1994, it because the General Assessment Management [DGE]. In 2002, it changed its name and functions to the Directorate General of Policy Assessment [DGEP].

33 These governmental education policies operate in the framework of the LGE, the Interior Regulation and Organisation Manual of the SEP, Secretarial Agreements in vigour and normativity of the government bodies themselves.
and schools, and whose results are diffused broadly to the public\textsuperscript{34}. In this manner, assessment is contemplated from three dimensions: as an exercise in accountability, as a means of informing parents and as sustenance of public policies.

The ACE, in its axis V, Assess to Improve, establishes that assessment should act as a stimulus to improve education quality, favour transparency and accountability and act as a base for the appropriate design of education policies. In that sense, three commitments are pointed out: 1) articulate the SNEE by grouping government agencies, processes and existing procedures, 2) assess all those who take part in the education process in an exhaustive, periodical manner, and 3) stipulate performance standards of SEN components, processes and resources.

Under this policy, progress has been made in assessing students’ classroom learning. Firstly, in the new study plan and programmes for primary education (SEP, 2009\textsuperscript{35}), more weight is placed on assessing education by considering it a permanent assessment process, more than the assignment of grades, and the need is mentioned to use tools allowing the student to be compared to criteria derived from his own initial situation. Furthermore, some orientations are included in teachers’ resources for the assessment of students’ learning. Secondly, in 2008, the SEP initiated a criteria and reference standard construction process for assessing students’ learning, the first version of which has been publicised. Thirdly, Secretarial Agreement 499 was established in 2009, for which two articles of Agreement 200 (articles 7 and 8) were reformed, which specify when grades are to be assigned and communicated to parents throughout the school term (DOF, 4 November 2009).

Mexico has continued to take part in LLECE studies, PISA, and the Teaching and Learning International Survey [TALIS] since 2008, which was created by the OECD with the aim of realizing a comparative analysis of the professional profile, and the characteristics and working conditions of lower secondary teachers, in the context of education systems of more than 20 countries [OECD, 2009].

With the signing of the ACE, the Mexican government invited, for the first time in 2008, international agencies to accompany the on-going education reform process. The World Bank prepared a country note on the ACE design and signed a two-year agreement with the OECD, whose objective was to interchange successful experiences in three basic settings: school management and social participation; the professionalization of teachers and education authorities on their facets of income, promotion and professionalization; and assessment incentives and stimuli. This report emerges in the framework of this interchange.

Recent advances show that assessment in Mexico forms an important part of actions and goals established in the education sector programmes of the last two federal government terms. In this framework, programmes defined by public policies have an assessment component, which allows them to follow up on fulfilment of their objectives and goals, diagnosing and appraising their development and probable reorientation. In the same manner, other education policies regarding students, teachers and schools consider assessment to be an important and integral part in fulfilling their objectives (SEP-UPEPE, 2010\textsuperscript{36}).

2. LEGAL FRAMEWORK AND RESPONSIBILITIES INVOLVED IN SEN ASSESSMENT

The LGE is the legal framework for basic education assessment in Mexico. This assessment is an attribution of the federal education authorities established in Article 12 of the Law (DOF, 22 June 2009)\textsuperscript{37}. Federal education authorities have the attribution of “conducting periodical, systematic assessment examinations to certify that teachers and education authorities are people appropriate for relating to students by respecting rights consecrated in the Constitution, International Treaties ratified by the Mexican government and other legislations applicable to children and adolescents” (Article 12, section VII, DOF, 22 June 2009). It is also established that global SEN planning and programming must be done and appraised and general guidelines set for assessment to be conducted by local or state education authorities (Article 12, section XII, DOF, 22 June 2009).

\textsuperscript{34}In the first place, basic education strategies attempt to strengthen the school’s planning and decision-making capacities through results of the assessment, translating them into an improvement in the teaching and learning processes; secondly, to continue with the application of systematic assessment of teachers and directors, and establish the criterion-based assessment of federal programmes; and thirdly, to strengthen and diversify transparent assessment and accountability mechanisms of the processes and results of continuing education (SEP, 2007).

\textsuperscript{35}These attributions are specified in chapter II, section 4 of the LGE, “Assessment of the national assessment system”, consisting of articles 29, 30 and 31 (DOF, 22 June 2009).
Specifically, SEN assessment corresponds to the SEP, without local education authorities being pressed to carry out this task in their respective capacities. Local education authorities have the power to conduct their own assessments and coordinate efforts made in the federal setting. Both national and state assessments should be systematic and permanent, and results in their field taken by education authorities and used as a base for adopting appropriate measures (Article 29, DOF, 22 June 2009).

Education institutes established by the state through their decentralised agencies and authorised individuals or those having officially recognised studies, grant education authorities all the facilities and collaboration needed to carry out assessment activities. That suggests timely provision of all the information they need, taking measures allowing the effective collaboration of students, teachers, directors and other participants in education, and facilitating the realisation of exams for statistical and diagnostic purposes and gathering of necessary information in schools (Article 30, DOF, 22 June 2009).

Added to the aforementioned, education authorities are responsible for notifying teachers, students, parents and the public of results of assessments conducted, as well as any other global information allowing the development and progress made in education to be measured in each federal entity (Article 31, DOF, 22 June 2009) (see Annex F).

The aforementioned responsibilities, of course, correspond to aspects of global SEN assessment, and not necessarily concrete aspects, which regulate, for example, assessment of students’ classroom learning for accreditation, an aspect regulated in each study plan and programme (Article 45, section IV, DOF, 22 June 2009). This considers that the exclusive attribution of federal education authorities is to establish that basic education study plans and programmes provide direct education service to the states and apply assessments in conformance to what is set forth by federal education authorities.

Government agencies forming the national assessment structure are: the Federation, represented by the SEP36; federal entities, represented by local education authorities, national and public specialised technical agencies, such the INEE, and others not in the education sector, such as the CONEVAL, of a private nature, such as the CENEVAL, international agencies, like the OECD or UNESCO, and other federal and state collegial agencies. The powers of diverse agencies in basic education assessment in Mexico are described below.

**SEP agencies.** The SEP has developed different education assessment activities in the country through its administrative units, whose responsibilities are set forth in the Interior Regulation of the SEP (DOF, 11 October 2006). The UPEPE stands out inside the SEP, and is in charge at a federal level, of developing and coordinating the SNEE in consultation with federal entities, as well as with specialised entities and competent administrative units (DOF, 11 October 2006). The DGEP, DGPP, Directorate General of Accreditation, Incorporation and Revalidation [DGIPEF], and National Coordinating of the Teaching Career [CNCM] all depend on the UPEPE. These agencies have specific functions in the assessment setting, which are pointed out in the SEP Organisation Manual (DOF, 16 June 2008) (see Annex G).


**State Assessment Agency.** As a result of the ANMEB, it was established that assessment efforts needed to be undertaken jointly by the states and federal government. Therefore, the creation and strengthening of the AEE was proposed, as were agencies responsible for assessment in the states. In the state setting, 26 states consider education assessment in their local education legislation; five states have autonomous assessment institutes - Chiapas, State of Mexico, Nuevo Leon, Sinaloa and Sonora—all states take part in assessments conducted at a national level [Excale, ENLACE, PNCM, OCl, ENAMS, IDANIS, IDCIEN]; 17 states take part in international assessments conducted in the country [PISA, TIMSS, TALIS, SERCE, LLECE], and based on information received from

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36 The SEP has a permanent relationship with specialists from different investigative institutions, such as the Department of Education Research [DIE] of the National Polytechnic Institute [IPN], Ibero-American University [UIA], Latin American School of Social Science [FLACSO], Centre for Research and Teaching of Economics [CIDE], and the Mexican Council for Education Research [COME]. It publishes calls coordinated with the National Council of Science and Technology [CONACyT] to promote research of different topics on education.
this report, it was corroborated that nine states have their own assessment at a state level - Coahuila, Colima, State of Mexico, Guanajuato, Jalisco, Nuevo Leon, Quintana Roo, Sonora and Zacatecas - (see Annex H). Of assessment efforts identified in these states, seven assessed the learning of basic education students, three assessed teachers, one assessed supervisors and heads of sector, and one assessed education programmes. Even though the oldest assessment dates back to 1998, most have taken place in this decade and on an annual basis, while others are oriented to primary or lower secondary, and only one includes upper secondary and normal education37 (see Annex H).

**Other agencies.** Public, national, specialised and technical agencies took part, such as the INEE (see Annex G) in the country’s education assessment, and others outside the education sector, such as the CONEVAL38, private organisations, the CENEVAL and international organisations, such as the OECD and UNESCO. Other agencies also participate, such as the Planning and Evaluation Commission [COMPYE], created by the CONAEdu, the Working Group of State Coordinators Responsible for Job Competition [GTRR] and the Independent Federalist Evaluation Unit [OEIF], and external assessment39 agencies not in the education sector, such as the Secretariat of Civil Service [SFP] and the Professional Career Service [SPC].

The power granted by law of civil society organisations currently consists of conducting polls and simple samples and the preparation of indexes, such as the inclusive development index to compare the 32 education systems (SCD04).

Finally, the different assessment efforts, such as ENLACE, Excale, PNCM and programme assessment, among others, have a responsible, or coordinating agency, a technical committee, and in some cases, an activity co-ordination forum. The aforementioned is complementary to the recipients and users of the information, such as national and state education authorities, the intermediate sector (heads of zone, supervisors); principals and teachers in schools, the general public and communication media, whose powers, needs and capacities are diverse [SEP-DGEP, 2010].

### 3. Publishing and Use of Results

Three distinct phases are recognised in Mexico, which relate to the publishing and use of assessment results, and are equivalent to the three aforementioned periods describing the development of basic education assessment (Martinez Rizo, 2003). The first period was characterised by an almost non-existent disclosure of assessment results, even at the level of national and state education authorities, for which results were not used for feedback to the SEN or making decisions on education policies. Information was not released to recipients or users because the assessment results were considered confidential. There were improvements in the technical quality of assessments but the results were not released, with the exception of those required for entry to lower secondary education, IDANIS in this case, results of student assessment applied in the classroom by the teacher and released to parents and whose only function was official recognition of the grade.

During the second period, the education policy in effect at the time acknowledged that assessments were not released and the need for accountability was explicit. Support offered to compensatory programmes, pressure placed on the PNCM, development of national standard tests and Mexico’s participation in international projects set the bases for releasing results among national and state education authorities. For example, teachers were given PNCM results for feedback purposes. However, releasing results to the public was not considered fundamental and they were not used for decision-making or actions that would have an effect on students, teachers or schools (GTEE-PREAL, 2007; Martinez Rizo, 200840; SEP-DGE, 2002).

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37 It should be noted that these efforts represent important progress in a state level education assessment, and data was obtained expressly for this report by the state Secretariats of Education, except for information on the state of Sonora, which was extracted from pages in Internet. The aforementioned does not exclude the fact that there has been significant progress made in assessment at a state level for other states in Mexico. For more details on this data gathering process, go to the methodology for preparation of this report in the introduction.

38 The CONEVAL is a decentralised public agency of the Federal Public Administration created in 2005, with autonomy and the technical capacity to generate objective information on the social policy situation and poverty measurement in Mexico. Therefore, it is in charge of regulating and coordinating assessment of the National Social Development Policy, in terms of policies, programmes and actions executed by public agencies. Since 2007, it assesses federal social development programmes, which, among others, operate in basic education schools in preschool, primary and lower secondary levels. For assessment of the programmes, expert external assessors in matters pertaining to higher education are hired, such as the National Autonomous University of Mexico, [UNAM], the Metropolitan Autonomous University [UAM] and the Colegio de México, A.C., institutes or research centres, such as FLACSO and the CIDe; or private consultants, such as Civicus and Consultores en Gestión Pública y Social, S.C. These are some of the examples of bodies that conduct external assessment on social programmes in collaboration with the CONEVAL. For more information, consult the CONEVAL assessors directory at http://www.coneval.gob.mx
In 2000, the third period, the DGGE made its first attempt to publish results by releasing students’ results in order to assess PNCM teachers with “Approximate education quality in Mexico” brochures. However, few issues were distributed internally, and not to the public. In 2002, the education policy started to play an important role in the publishing and use of results for their appropriate interpretation. Furthermore, with creation of the INEE, the pattern was to transmit information more extensively to different members of the education sector with the intention of getting feedback on education policies and accountability to the public on the education given to students.

The SEP, mainly through the DGEP, started releasing results to teachers, principals, parents and the general public, a sample of which has been the ample publication of ENLACE test results. Consequently, this stage is characterised by a growing interest in publishing results and using them sustain decisions contributing to improving the quality of education. For that reason, results are published in SEP web pages or a printed version. As for the use of results, they are returning to results of national and international tests for curricular development and creating public policy actions to promote their use, which include the preparation of materials, training activities and continuous education, as well as programmes contributing to education quality.

Assessment results are linked to classroom practices through different aspects. First, the tests drawn up for each assignment are based, generally, on the national academic curriculum and group of aptitudes to be attained in each grade, aspects which every teacher is familiar with and must approach in the classroom. For the preparation of test components forming part of the assessment instrument, primary education textbooks used by all teachers in their work, study plans and programmes essential to teachers performing their role in education are also taken into account.

Secondly, results of assessments are sent to schools or are available in Internet with the objective of teachers reflecting on possible areas or subjects that need strengthening in the classroom and identifying academic and pedagogical areas in which they lack training to improve their classroom performance and establish a strategic plan to attend students that are lagging far behind. The principal can identify teachers whose students are obtaining low assessment scores when results are at a student or school level, define strategies to improve that performance through teacher training and promote the sharing of education experiences among teachers.

Thirdly, current study plans and programs for primary and lower secondary education have once again taken up the results of national and international tests for curricular planning (SEP-DGDC, 2010; SEP-DGEP, 2010).

In summary, considerable progress has been made in transmitting and using the results. However, diffusion still needs to be consolidated and efficient, and assertive use made of results by different recipients and potential users. According to audiences, differentiated results do not guarantee that the manner in which it is presented is accessible to users, who are not necessarily specialists in assessing. In the same manner, it is important for these results to be translated into assessment recommendations applicable to everyday practice in schools. This implies that reports should not only contain statistics, but an analysis of strengths and weaknesses, as well as suggestions for improvement (INEE, 2005b; Martinez Rizo, 2005, 2006, 2008b; SEP-DGAIR, 2010; SEP-DGIE, 2010; SEP-DGEI, 2010; SEP-DGEP, 2010).

In some cases, the use of results deviates from the assessment’s objective, which distorts and weakens the purpose of assessment. This condition could cause schools and teachers to place too much attention on the results of students’ learning, which carries what is taught for the assessment with it and parents having to coach their children to solve it (Backhoff, Andrade, Sanchez and Peon, 2008). Hence, it is important to reflect on the purposes for which the tests were conceived, to orient the use of results to those purposes and install public policies related to the reality of their use. Finally, greater use of results by directors, teachers and parents is needed, and even by the students themselves, such as better articulation between results of the assessment and decision-making, and establishment of mechanisms guaranteeing that those taking part in education use the results of assessment to improve teaching and learning processes (Banegas and Blanco, 2005; INEE, 2006a, 2006b, 2010; Martinez Rizo, 2005; SEP-DGEP, 2010; SEP-DGPP, 2010; RP110; RPS11).

For example, results of diagnostic testing have been used for the publication of school ranking in communication media and the granting of stimuli to teachers in accordance with their students’ scores and public recognition for students with the highest scores (Loureiro, 2009).
4. CHALLENGES AND PERSPECTIVES OF BASIC EDUCATION ASSESSMENT IN MEXICO

There are assessment agencies in the education sector: the federal authorities, AEE, state and national education assessment institutions, education operation at a municipal, zone or district level and external assessors. They all assess participants in education in an up, down and horizontal manner. There are efforts for assessing students’ learning, school management, teachers, principals, infrastructure and federal programmes of the education sector. They have information systems and assessment policy initiatives for each component in place, as can be seen in the following Chapters of this report. As for government policy, the idea of the SNEE in basic education appears once again as a priority in the Education Sector Programme 2007-2012. The DGEP continues to work on SNEE operation proposals, and a search for the best type of organisation to reach proposed objectives.

Therefore, there are assessment efforts and practices in Mexico for the creation of a complex SNEE but it needs greater articulation. Some reasons why that articulation has not been fully achieved are the dimension and heterogeneity of the SEN, as well as the designation of responsibilities and current autonomy levels, which make implementation a greater challenge. One of the particular challenges consists in achieving a better balance in assessment since efforts have been concentrated mainly on diagnosing the quality of students’ learning, while assessment of the rest of the components does not show such significant progress. In that sense, they are still facing huge challenges in teacher and school assessment (AEA08; AEF05; AEM06; SCD04; UNA03; UNF02).

In the framework of the current education policy, an attempt is being made for the SNEE to articulate and coordinate efforts made and those to be undertaken for education assessment in the future. There should also be a link for discussions and creating policies for future assessment, procuring that unnecessary duplications and aspects favouring development of education are not neglected. It should also assure that different assessment and measurement techniques are correctly articulated in a strategy to improve education results, making an effort for existing assessment procedures and tools to be coherent and pertinent to the object of assessment, adjust to those involved in it and align with objectives proposed in the policy (SEP-DGEP, 2010).

There are two tendencies seen in respect to the most relevant agencies for articulation of assessment efforts in a system. The first is that an agency should articulate assessment efforts of those involved in assessment, for all types of SEN education - basic, upper secondary and tertiary - and of the participants, education processes and material resources from standards or benchmarks regulating this process (RPJ10; RPS11).

The second tendency is to designate an independent, autonomous agency, such as the INEE, with the representation of federal and state authorities, representation of teachers, civil society, national and state assessment institutions and research centres (INEE, 2006a, 2006b, 2010; SEP-DGPP, 2010; AEA08; AEF05; AEM09; SCD04; UNA03; UNS01). This agency would act as a technical secretariat with the support of executive committees.

Regardless of the process, this should be a long-term articulation project with the following functions: Firstly, return to what exists, locate what each agency develops, identify what remains to be done and what has been duplicated, define priorities and join forces. Furthermore, meta-assessment functions, such as issuing a report on the situation of the SEN with information offered by the rest of the agencies with assessment responsibilities. Secondly, determine the pertinence of assessment on technical or operative questions and make ample recommendations and observations for each education service as to how they could distribute resources (material, content) and analyse the pertinence of each assessment effort. Thirdly, issue recommendations on assessment content, its configuration, performance of the person who designed it, how it was made, who worked, and their technical quality, among others.

Some challenges this process would face are:

A. Promote systematic, constructive dialogue among those interested in assessment: education authorities, teacher representatives, the academy and civil society to make the assessment understood and socially accompanied.

B. Establish whether the SNEE considers only basic education or whether it should integrate the three types of education: basic, upper secondary and tertiary.
C. Detect the strengths and niches of opportunity for each of the current assessment efforts, and consequently, determine whether these practices are sufficient, how to avoid the duplication of efforts, what needs to be developed, under which conditions, whether there are differences in methodological criteria, do they work and how they work and how to make existing efforts transmit the information needed, among other aspects.

D. Organise proposed regulations to delimit the function of assessment agencies in federal and state settings; state and municipal, as well as at an intrasectoral level (Banegas and Blanco, 2005; INEE, 2006⁴; 2006⁵; 2010; Martinez Rizo, 2005; SEP-DGPP, 2010).

E. Formulate basic education assessment questions, in accordance with SEN objectives, which should be articulated and consistent, allowing a coherent project to be created, which sees aspects needing improvement, promotes consensus and the making of decisions. For that, fulfilment of basic education needs must be assured: coverage and minimum of normal SEN operation (UNS01).

F. Improve the training and professionalization of cadres participating in different phases of the assessment process (Banegas and Blanco, 2005; Martinez Rizo, 2005; SEP-DGPP, 2010), and promote and contribute to the training of assessors (SCD04).

G. Broaden the assessment spectrum. Other aspects likely to be assessed are: school principals, their management, social participation, participation of civil societies, community participation of teachers and students; pertinence of study programmes; quality of the system’s material and human input; SEN administration and management; design, communication and implementation of policies and programmes; and the general impact of these programmes on education (Banegas and Blanco, 2005; INEE, 2006⁴; 2006⁵; 2010; Martinez Rizo, 2005; SEP-DGPP, 2010; AEF05; RPJ10).

H. Analyse the technical quality of current tests and achieve widespread awareness on the need to assure that technical quality of conducted assessments, which implies assuming that a test cannot be prepared in a short time if the intention is to obtain valid tools yielding reliable results. Furthermore, using a test for purposes and uses undetermined in its creation should be avoided⁴⁰ (AEA08; AEM09; RPJ10; RPS11; UNA03; UNF02; UNS01), as should the consideration of socioeconomic conditions in which different education services were offered (RPJ10; RPS11).

I. Promote greater participation of other participants to define assessment mechanisms and tools by seeking consensus (AEP06; SCD04). Furthermore, create a strategy for the publication of results, which is understandable and has social support (RPJ10; RPS11).

J. Take efforts of state entities into account in the clear expression of assessment and role of civil society (SCD04).

K. Assume that the measurement is necessary but insufficient. Consider the pedagogical sphere and understand assessment as being not only an examination process (UNA03; UNS01) or as a means of coercion (RPJ10), but as a rigorous, systematic data gathering and analysis process, which allows judgements and basic decisions to be made to improve the quality of SEN education.

L. Contribute to the consolidation of an assessment policy with systematic teacher assessment efforts (entry, exit, PNCM) and students (ENLACE), motivating these policies with a parsimonious outlook, and whose actions are designed in an integrated manner to cause effects propitiating more efficient use of available resources (SEP-DGEP, 2010; AEP06). Therefore, Mexico needs to “align different processes contributing to quality education: the curriculum, teaching material, systems used to educate and support teachers’ professional development, ways of administrating schools and the SEN, assessment systems and techniques used by teachers to facilitate students’ learning, meaning instruction and teaching” (Reimers, 2008).

⁴⁰ Other countries’ experiences show that the consequence of using the results of an exam for unforeseen ends leads to the appearance of practices that undermine quality: teachers dedicate themselves to teaching material for the exams and neglect areas not covered by them; schools use the results to promote marketing with no real base and parents assume that advertising pointing out that certain schools are better than others, with equally flimsy proof; and overall, the most positive aspect of assessment as an essential part of learning is lost from sight (INEE, 2008).
Assessment efforts and basic education practices currently used in Mexico are described in the following chapters. Marking off these efforts was complex because of the nature of the SEN, which needs its components assessed, and the fact that by assessing one of the system’s components, useful information is also provided, which contributes to its overall assessment. Because of that, efforts whose express purpose is to provide elements for SEN appraisal are included in Chapter 3: large-scale national and international information and assessment systems, and therefore, description in other chapters on efforts whose deliberate goal is to assess specific SEN elements, such as schools, teachers, students and education programmes, which are approached in detail in Chapters 4, 5, 6 and 7, respectively. This organisation, prepared for the report, is not attempting to lessen importance of the potential of each component for SEN assessment. On the contrary, it tries to facilitate holistic comprehension of the situation in Mexico.
CHAPTER III. SEN ASSESSMENT EFFORTS: INFORMATION SYSTEMS AND LARGE-SCALE ASSESSMENT

This chapter presents, firstly, current practices and proposals allowing systematic information to be obtained, which serves as input to assess the SEN and includes information systems created by the SEP and INEE, the joint product of both agencies, as well as that of the Educational Quality and Achievement Test [Excale] of the INEE and international assessments in which Mexico has taken part. Secondly, the broadcasting of information and use of results of said assessments is approached, thirdly are the policy initiatives, and lastly, challenges involved in these efforts.

1. SEN ASSESSMENT EFFORTS

Efforts to assess the SEN, presented in this chapter, are of two types. The first refers to the creation of information systems on the situation of different SEN components by means of an indicator calculator, which allows an x-ray of it to be obtained and builds a solid base for its assessment. These include the Continuous Statistics System of the SEP and the National Education Indicator System [SININDE] of the SEP and INEE. The latter refers to large-scale assessments applied to student and teacher samples at both a national and international level to be aware of the system’s results in the academic achievement setting — Excale, — and have an external reference, which allows the SEN to be assessed and compared to education systems of other countries –TIMSS, LLECE, PISA and TALIS.

A) INFORMATION SYSTEMS

SEP CONTINUOUS STATISTICS SYSTEM

The development of constantly updated information systems on SEN evolution has been a priority of the SEP for the past four decades. There have been historical series of references to the entire system, such as its coverage, dropout, failure and the number of basic education schools in the country. As the result of this work, there are indicators now, which allow diagnosis, in the best possible manner, of education quality and measurement of SEN results as a whole.

One of these efforts is the Continuous Statistical System to obtain statistical information on students, teachers, schools and groups of all levels and education services integrating the SEN. The Directorate General for Planning and Programming [DGPP] regulates and coordinates the system’s procedures with different regulatory areas of each level and education service, in collaboration with planning areas of the state Secretariats of Education. It also has the support of the National Statistics, Geography and Informatics Institute [INEGI].

Support from these areas helps needs for information to be seen, data gathering tools are defined and the results analysed to present basic SEN statistics. All schools and services and what sustains them are taken into account in these levels. The universe of this system is the Work Centre Catalogue [CCT], which is updated permanently by the Statistics Department of the Institute or Secretariat of Education in each entity in co-ordination with the DGPP (SEP-DGPP, 2010).

The information is gathered in each school by using the “911 Format” or “911 Questionnaire” integrated by a group of formulas handed out in schools at the start and end of each school year, which is why data is gathered twice a year, and include: the school’s identification, number of students and groups in each school, personnel in each of the functions, teachers who take part in the PNCM, the number and conditions of classrooms and family expenditures for the education of students. There is an annex to report information on special education needs, if there should be students requiring it, and an observation section as well (SEP-DGPP, 2010).

In respect to the data gathering process, the Institutes or Secretariats of Education are able to select the procedure they will follow to integrate the statistics of their entity. For example, they can distribute printed questionnaires, collect them and enter the data through the traditional system or request that schools answer the questionnaire in Internet and monitor the response progress until all information is received.

The formalisation report contains the total number of schools, students and teachers, shown by level and support. It was prepared with databases created from information in questionnaires transmitted through the system’s operative module. These numbers are considered official and endorsed with the signature of the Secretary or Director of
Education in the state. The aforementioned has the aim of ensuring that figures submitted to the DGPP are published officially with no later modifications. CCT information is also formalised, as are the reasons for schools not completing the 911 questionnaire.

Later, the DGPP validates information in databases by using processes to verify that information has not been altered, as well as the historical consistency. If inconsistencies are detected, the state is notified, requesting pertinent clarification or that files be replaced. The final step in the process realised by the DGPP consists of integrating national statistics to files sent by each entity and is done once there are no doubts or errors.

With that information available, the SEP follows up by calculating indexes of different education levels, such as coverage, failure and school dropout indexes, terminal efficiency indexes for basic and upper secondary education, as well as rates of absorption and distribution of enrolment by age and gender. These indicators are systematically constructed at a national level and by state. Based on statistical information and education indicators, prognoses of enrolment are prepared for each education level to help in the creation of state and historical series. That is done with two purposes. The first is to monitor progress achieved in the different education indicators and impact of public policies on the interior of the SEN for education planning. The second is accountability to society on education services offered by the SEN. This information is official input of the Government Report, Work Report, Public Account, official publications and international reports (SEP-DGPP, 2010).

Furthermore, based on the 911 Form, the content of Basic Statistics of the National Education System [EBSEN] is produced and information fed into Systems for Education Statistics Analysis [SISTESEP], and in particular, the Statistical Information System of Basic Education [SIEEB]41. These systems disaggregate information of general indicators on the enrolment of students, teachers and schools, as well as efficiency indicators — failure, repetition, intracycle and intercycle dropout — as well as in national settings and by state.

This information is available on-line through an information system called the National Education Information System [SNIE]42, which is available to the public. The following can be consulted: Interactive consultation of basic education statistics, Historical SEN statistics at a national level and by state, and historical series and prognoses on SEN education indicators. Another information system was developed and added to this system: Detailed Programming [PRODET], which gathers information on the increase in scholastic enrolment and need for new teaching positions, groups and schools.

**NATIONAL EDUCATIONAL INDICATOR SYSTEM (SININDE)**

The National Education Programme 2001-2006 established, as one of its objectives, the creation of a SNEE. In response to this mandate, the SEP through the DGPP, and the INEE through the Directorate of Educational Indicators [DIE-INEE], worked to define and build education indicator systems for both agencies, as well as a joint system called the National Education Indicator System [SININDE]. Its objective is to contribute elements to assess the quality of education services in Mexico, support the creation of prospective public policy projects and increase the quality of education services offered by the SEN. This has involved a great deal of conceptual definition, as well as the selection, systematisation and processing of information by the SEP and INEE (Banegas and Blanco, 2005; INEE, 20065; 2009b; SEP and INEE, 2006).

The first proposal of the SININDE consisted of a basic group of indicators, which was published in 2006 and has five sections:

a. **Context.** Includes three types of indicators: demographic, such as the annual population growth rate; sociocultural, meaning the percentage of indigenous population; and economic, which is per capita PIB.

b. **Resources.** Refers to financial resources as the national per-pupil education expenditure.

c. **Process.** Consists of two types of indicators: access to the SEN as the net scholastic rate by level and flow as failure, dropout and terminal efficiency indexes.

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41 For more details on the SIEEB, please visit http://siefb.basica.sep.gob.mx
42 For more details on the SNIE, please visit http://www.snie.sep.gob.mx/SNIESC/
d. **Results.** Refers to the percentage of graduates in each level of education.

e. **Impact.** Considers the impact of education on the average level of schooling, illiteracy and educational backwardness.

A technical data sheet for each indicator was presented in that publication, which included its definition, characteristics and construction criteria, as well as results of the calculations (SEP and INEE, 2006). Currently, the SININDE initiative has been recuperated by the Specialised Technical Committee for Education Information [CTEIE]43, which has included the system as part of its line of work (INEGI, 2009ª).

The original initiative of the SININDE and joint labour with the DGPP has allowed the INEE to continue developing an Education Indicators System [SIE] to support assessment of the quality of basic education, and in 2009, the construction of this system for upper secondary education (INEE, 2009b). The INEE defined the SIE as “a group of coherently organised statistical measurements with the aim of offering a panoramic vision, and integral to a certain degree, of the level on which SEN objectives are met and main weaknesses occurring in it so these objectives can be reached” (INEE, 2009b, p. 23). The SIE attempts to become a system of valid, trustworthy indicators designed with conceptual, technical and methodological rigour, which is useful to education authorities, teachers and researchers, as well as society in general. Based on this, a **systematic model for assessment of SEN quality** has been proposed, which consists of the following elements (INEE, 2009b):

a. **Context.** Defined as the socioeconomic and geographical space, which includes users of education, population cohorts of typical ages and socially and scholastically vulnerable groups. External variables having an influence on the SEN are also presented, which are the result of interaction between this and other social systems.

b. **Social needs.** Includes values shared with society regarding the functions of education in individual and social development, as well as priorities and goals defined to attain those values. They represent society’s group of expectations, aspirations and needs, to which the SEN must respond, and are translated as constitutional norms in the LGEE and/or international agreements advocated by the country.

c. **Planning.** Included in this category are the professionalization of teachers, establishment of desirable levels of learning, institutional development programmes for schools, and administrative rules and procedures, which the corresponding authorities must attain to reach education goals.

d. **Observed development.** Takes the system’s real input for operation - students, teachers and principals; physical infrastructure and furnishings; financial resources destined by different budget sources for operation of the system, among others, and their distribution in schools, the processes accomplished and results attained.

These indicators are disaggregated according to diverse criteria: states, type of locality, education level, gender, among others. Multiple information sources from various national institutions were resortted to for creation of the SIE. The DGPP provides integrated, validated databases on education statistics throughout the school year. All of the information is gathered from national schools by using the 911 Form, which is the mainstay used to calculate different indicators for student access, trajectories, processes and management. The DGEP supplies results of assessments done on students [ENLACE] and teachers [PNCM]. The INEGI contributes bases of the most recent Population and Housing Census, National Income and Household Expenditures Survey and National Occupation and Employment Survey to calculate social context indicators and education results. The National Population Council [CONAPO] contributes with Projections on Population in Mexico 2005-2050 and marginalisation indexes at a local level, the urban marginalisation index and exclusion index. Furthermore, UNESCO databases are consulted

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43 In 2009, the Governing Board of the Mexican Statistics Agency, INEGI, approved creation of the CTEIE with the objective of "consolidating the National Education Information System for its constitution as the base for generating statistical information processes of national interest, assuring the obtaining, integrating and broadcasting of variables and indicators through processes associated to registration systems for teachers, students and schools, among others" (INEGI, 2009ª, p. 2). The committee’s function is to integrate statistical information, indicators and prognoses on diverse variables and indicators associated to the SEN and its context. The CTEIE is formed by current UPEPE, representatives of Undersecretaries of Basic, Upper Secondary and Tertiary Education, administrative office of the SEP, Federal Administration of Education Services of the Federal District, INEE, CONAFE, National Institute for Adult Education [INEA] and INEGI.
and those of the INEE corresponding to Excale outcome on learning and information from context questionnaires applied to students, teachers and principals through these tests (Banegas and Blanco, 2005; INEE, 2009b; SEP and INEE, 2006).

SIE results are published annually in the *Educational Overview of Mexico: Indicators of the National Education System* report. To date, seven reports on the basic education subsystem have been published. In the 2009 report, 50 indicators were presented, 30 in the printed version of the report and 20 more in the electronic annex. These indicators are divided into five categories (INEE, 2009b):

a. **Social context.** Includes socioeconomic indicators, such as the schoolable population, marginalisation and remoteness, child labour and school attendance.

b. **Agents and resources in the system.** Considers profiles of educators, and technological and financial resources.

c. **Access and trajectories.** Includes indicators, such as coverage, educational backwardness, passing, dropout and graduation.

d. **Educational processes and management.** Describes the organisation of complete, multi-grade and two-teacher pre-primary, primary and lower secondary schools.

e. **Educational outcome.** Includes immediate results, measured with achievement in the Excale and employment, educational, cultural, and civic and health settings.

Printed and electronic versions (INEE *Banco de Indicadores Educativos* webpage) of these reports are released.

**B) LARGE-SCALE ASSESSMENT**

Aside from previously reviewed efforts, which consolidate a continuous statistics system and education indicator system, there are other proposals allowing SEN assessment by means of learning and/or skills achieved by students at the end of a given school year or conclusion of basic education. These proposals are national and international and have a diagnostic-formative function, not a creditable one. Therefore, its objective is to obtain and analyse information systematically to offer elements allowing the SEN system to be assessed, giving it feedback and orienting decision-making to improve it. Said proposals assess the educational achievement or development of certain skills in students, as well as elements of the context, resources and education processes. Regarding the last mention, context questionnaires are applied, which allow establishing differences among students in accordance with variables, such as the education service, state, gender, age, and identification of factors associated to learning and contributing to the explanation of variations in educational achievement. However, there are no adjustments for students in need of special education. The Excale and international assessments in which Mexico has taken part are described in the next section.

**EXAMS ON EDUCATION QUALITY AND ACHIEVEMENT [Excale]**

The Excale are an effort by the INEE to assess student achievement in certain assignments and grades in order to have valid, trustworthy information on that aspect and contribute elements to assess the SEN. Excale exams are applied at a national level since 2005 and have the objective of assessing student achievement (Martinez Rizo, 2008a). In that manner, tests drawn up by the INEE are not designed for individual student or school assessment, but offer an overview of education results at a system level (INEE, 2009b), and based on that, they contribute to education management and actions needed to improve the SEN.

The Excale have the national curriculum as a reference and are criterion-based tests applied to representative samples of students in all states. Areas assessed by the national curriculum are Spanish, Mathematics, Natural Sciences and Social Sciences; and the declarative, procedural, schematic and strategic content of each is explored. Most of the test components are multiple choice, though constructed response test components have been added gradually to assess more complex dominions, such as written expression.
The Excale have a matrix design, which means the test components are grouped by blocks for their uniform distribution among students, and not all students answer the same questions. That is why grading at a student level is not precise, but the results are at school, state and education service level, which is the main point of interest of the INEE (Backhoff, Monroy, Peon, Sanchez and Tanamachi, 2005). There are approximately 130 test components for each grade.

There are two stages in the student selection method. First, schools are selected, and later, the students in those schools with of probabilistic procedures, which allow trustworthy inferences to be made on the total number of students in the country. The samples are representative and designed so results can be calculated and broken up at different levels: at a national level by education service and state (Backhoff, Andrade, Sanchez and Peon, 2007). Approximately 3 000 schools and 50 000 students were assessed.

Context questionnaires were also applied to students, teachers and principals to know the degree of influence by factors associated to learning. Information derived from these questionnaires allows assessment results to be interpreted (Backhoff and Diaz, 2005; Backhoff, Monroy et al., 2005; Martinez Rizo, 2008).

Assessments are conducted in the following grades every four years: third year of pre-primary, grade three of primary, grade six of primary, third year of lower secondary and the third year of high school. This outline allows follow-up to be given to different generations of students, and the same grades compared through time in four-year periods (Backhoff, Monroy et al., 2005; Backhoff and Diaz, 2005; Martinez Rizo, 2008).

The planning and creation process of exams consists of 7 phases and 16 states in which diverse committees take part by contributing technical validity and legitimacy to the process. These stages encompass from the designing of the exam to the validation of test components and assembly of the exams. The INEE has a technical group, which coordinates the construction of each exam, with the participation of five working committees formed by specialists not in the INEE. Each group has one of the following purposes: 1) design and justify the exam’s table of contents, 2) develop the specifications of test components, 3) construction of test components, 4) establish achievement levels, and 5) validate test components. Members of each committee are different and represent groups and agencies related to education imparted in the country (INEE, 2005).

Excale scores are shown on a scale from 200 to 800, with a mean of 500 points and a standard deviation of 100. Exams are scored based on the Item Response Theory, using the Rasch Model. Though all exams use the same scale, it does not suffice to compare their results because they are assembled from different domains (Backoff et al., 2007).

Achievement Levels Committee set scoring criteria in such a way that students are placed in four performance levels: “Below basic”, “basic”, “average” and “advanced”. “Below basic” means there are significant gaps in the curricular use of scholastic knowledge, skills and proficiency, and that satisfactory progress in the subject is limited. “Basic” is the essential use of scholastic knowledge, skills and proficiency needed to continue progressing satisfactorily in the subject. “Average” means there is substantial use of knowledge, skills and proficiency, highlighting good use of what is included in the curriculum. “Advanced” is optimum dominion of knowledge, skills and proficiency, reflecting maximum use of what is included in the curriculum.

The results of application of the Excale allow: 1) knowing students’ achievement levels based on the national curriculum, 2) establishing differences in students’ learning according to their strata or education service, state, gender and age, 3) identifying social and scholastic factors associated to learning and contributing to the explanation of variations in education achievement among different groups of students, and 4) creating proposals for improvement, for example, the INEE has developed material and tools to support teachers with assessment results (i.e. Backhoff et al., 2007; Backhoff et al., 2008; Backhoff, Peon, Andrade and Rivera, 2006; Sanchez and Andrade, 2009).

These results are released every year in the Quality of Basic Education in Mexico report, in specific reports on each area assessed and the results of context indicators. They can be consulted by the public, and publications are free of
Report of Basic Education Assessment Practices in Mexico, 2010

charge and can be obtained in printed or electronic versions\textsuperscript{44}. Furthermore, public presentations are made to federal and state educational authorities.

**MEXICO’S PARTICIPATION IN INTERNATIONAL ASSESSMENTS**

The purpose of Mexico’s participation in international assessments is to have an external reference allowing SEN assessment and establish comparisons to education systems of other countries, regardless of whether they have different levels of development, or not. Participation in international assessment projects broadens and enriches the national perspective, compliments SEN diagnosis obtained in national tests and allows making better-informed decisions (INEE, 2006\textsuperscript{d}, 2010).

These assessments can be classified into three types, depending on who is being assessed, what they are measuring, and the reference used. The first type of assessment measures students’ scholastic achievement based on curricular content and their results when finishing a grade or school year, regardless of their age. The second type measures the generic skills acquired when they reach a certain age, regardless of curricular content or grade. The third type explores scholastic processes and teachers’ educating techniques (Backhoff and Diaz, 2005; Backhoff and Sloan, 2003; Díaz and Flores, 2008; OECD, 2007, 2009\textsuperscript{b}). To date, Mexico has taken part in the four international assessments described below.

i. **Trends in International Mathematics and Science Study (TIMSS)**

The TIMSS study is a collaborative research project of International Association for the Evaluation of Educational Achievement, [IEA] with the aim of measuring, comparing and explaining student achievement of three levels of education in different countries in the areas of natural sciences, and mathematics. To date, four studies have been conducted in more than 40 countries\textsuperscript{45}, in 1995, 1999, 2003 and 2007, so results constitute a tool for: a) measuring education achievement of a country in the studied levels and areas, b) redefining its curricular objectives, and c) modifying teaching practices in the classroom. Mexico participated with the IEA only in the first study, whose application was coordinated by the DGE. Later, in 2000, the DGE undertook a national study using multiple-choice questions of the 1995 TIMSS (Backhoff and Diaz, 2005; Backhoff and Sloan, 2003; INEE, 2006\textsuperscript{5}).

Education levels taken into account for this appraisal are: a) the two levels with the greatest proportion of 9-year-old students — grades 3 and 4 for Mexico —, b) the two levels with the greatest proportion of 13-year-old students\textsuperscript{46} — first and second years of lower secondary for Mexico — and c) the last grade of lower secondary education\textsuperscript{47}, which was not taken into account for Mexico. School and student samples were selected in each country. The exams were designed through the use of a detailed curricular analysis in which specialists from member countries took part and test components included multiple choice and open ended questions (Backhoff and Diaz, 2005; Backhoff and Solano, 2003; INEE, 2006\textsuperscript{5}).

In addition to the assessment of curricular knowledge in the aforementioned areas, context questionnaires were applied to the principal and teachers of schools to know more about students’ sociocultural environment, their attitude toward learning, characteristics of schools and the type of teaching they received. This information allows the contextualisation of countries’ results and identification of factors associated to student learning (Backhoff and Diaz; Backhoff and Solano, 2003; INEE, 2006\textsuperscript{d}, 2010).

In respect to the publishing of results, the Mexican government decided that its participation in the 1995 application should not be published in the report. However, the DGE maintained a copy of the original results, which was provided by the IEA and allowed a second application to be done in 2000 on a sample of approximately 20,000 students with the multiple-choice test components of the national test. Additionally, in 2003, the INEE requested the results of both assessments from the DGEP in order to analyse and transmit them to the public and the

\textsuperscript{44} For a more detailed description of the Excale, we recommend consulting the following documents: 1) Excale, Exámenes de la Calidad y el Logro Educativos. Proceso de construcción y características básicas, 2) Exámenes de la Calidad y el Logro Educativos (Excale): nueva generación de pruebas nacionales, and 3) Manual técnico. Diseño de Exámenes de la Calidad y el Logro Educativos (Excale), accessible to the public in the INEE webpage: http://www.inee.edu.mx/

\textsuperscript{45} In 1995, 41 countries took part in the report. Colombia was the only Latin American participant because the results of Mexico and Argentina were not published. In 1999, 38 countries took part, among which were Chile and Argentina.

\textsuperscript{46} This population was the main TIMSS target.

\textsuperscript{47} In this case, countries had the additional option of assessing two special groups of students who were receiving advanced mathematics or physics courses (Backhoff and Solano, 2003).
country’s educational authorities. This analysis was done through an agreement between the INEE, Autonomous University of Baja California [UABC], Institute of Educational Research and Development [IIDE] the American Institute for Research, and published in the Backhoff and Solano report (2003).

ii. Explicative and comparative regional studies of the LLECE

Explicative and Comparative Regional Studies have been coordinated by the LLECE, created in 1994 by the OREALC of the UNESCO, with the objective of assessing the quality of education systems in Latin American and Caribbean countries through the learning achievement of primary education students in language, mathematics and natural sciences, contextualising that learning according to factors of the student, classroom, school and context. Additionally, a regional consultation and cooperation outline is sought among countries in the education assessment setting, as is a space for professional support in the forming and training of technical teams for national assessment and measurement systems.

Strategic LLECE objectives are: a) Produce information on achievements in learning and associated factors of countries in the region; b) Generate knowledge on the assessment of education systems and their components: students, teachers, schools, programmes and policies, among others, c) Contribute new ideas and focuses on assessment of education quality, and d) Contribute to strengthening local capacities of the countries’ assessment units.

To date, the LLECE has conducted two studies, the First Regional and Second Regional Comparative and Explanatory Study [SERCE]. Thirteen Latin American and Caribbean countries took part in the first study of 1997: Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Honduras, Mexico, Paraguay, Peru, the Dominican Republic and Venezuela. The learning achievement of students in primary grades 3 and 4 was assessed in language — reading and writing — and mathematics. Application was coordinated by the DGE and the results published by LLECE in 1998 and 2000. The second study [SERCE] was planned in 2002 and applied in 2006 with the participation of 16 countries: Argentina, Brazil, Chile, Colombia, Costa Rica, Cuba, Ecuador, El Salvador, Guatemala, Mexico, Nicaragua, Panama, Paraguay, Peru, the Dominican Republic and Uruguay, with the state of Nuevo Leon acting as a subnational entity. Learning achievement in the same areas was assessed of primary grades 3 and 6, with optional assessment of natural sciences for grade 6. Unlike the first study, the SERCE added the perspective of life skills. Results were published in 2008 by the INEE, as the coordinating agency for this assessment in Mexico (Backhoff and Diaz, 2005; Diaz and Flores, 2008; INEE, 2006b; Martinez Rizo, 2008b).

Organisation of the study includes technical co-ordination, national coordinators, national teams, a technical consultant team, as well as panels of experts and external consultants. Participation of the INEE and AEE in the second study stands out, (Backhoff and Diaz, 2005; Diaz and Flores, 2008; INEE, 2006b).

The tests are designed by using common content of official curricula of countries in the region and structured with a focus on life skills promoted by the UNESCO. Participating schools are selected from a list sent by each national coordinator, after which the LLECE technical co-ordination area selects a representative sample of schools for each country to include approximately 4,500 students. In Mexico, 157 schools, including 4,753 grade 3 and 4 students and 4,825 grade 6 students, took part in the SERCE.

The tools are notebooks and context questionnaires. The former include multiple-choice and open-ended test components. The test is assigned at random and students answer questions in booklets related to two blocks of subject matter. The context questionnaires request socio-demographic, family and personal information and are applied to students, teachers, principals and families, the last of which is optional.

The results of student performance are expressed in two manners. One is through students’ mean scores and their variability by country. These scores are on a scale with an average of 500 points and standard deviation of 100. That means almost all students’ scores are in the 200 to 800 range. On the other hand, they are expressed through the use of students’ percentages by performance levels. Both the mean scores and performance percentages are shown by grade and evaluated (Diaz and Flores, 2008).
The results of these studies are expected to generate relevant information and knowledge for education policies, as well as actions and decisions regarding scholastic practices and processes, which improve and strengthen the quality offered by the SEN. It should be pointed out that this constitutes the first international effort to include a large number of Latin American and Caribbean countries (Backhoff and Diaz 2005; Diaz and Flores, 2008; INEE, 2006; Martinez Rizo, 2008). Mexico continues taking part in this assessment and is currently planning the Third Comparative and Explicative Regional Study.

iii. Programme for International Student Assessment (PISA)

The PISA programme, organised by the OECD, is a comparative, periodical study to assess the capacity of 15-year-old students, using their knowledge and skills to face challenges that arise in the world today. Traits defining PISA are the orientation to countries’ education policies, the innovating competence concept, which implies application of knowledge and problem solving, the relevance of content to training throughout life, tri-annual periodicity, which allows countries to do a follow-up on their progress and the geographic scope and solidity of their methodology. This exercise has been the source for the development of other assessment processes. As a result, PISA is considered to be the most extensive and rigorous international programme that exists for assessing scholastic achievement and gathering data on personal, family and institutional factors that could help explain differences in the results (Diaz, Flores and Martinez Rizo, 2007; OECD, 2005b, 2006, 2007, 2009b; Vidal and Diaz, 2004).

To date, four assessments have been done — 2000, 2003, 2006 and 2009 — to assess students’ capacity to apply knowledge and skills, as well as analyse, reason and communicate with efficacy when they propose, resolve and interpret problems related to different situations. They are focused on three areas: reading, mathematics and science, and one is emphasized in each application in such a way that the first assessment cycle was completed in all three areas with the first three applications. A second cycle, which started in 2009, is now being developed and reading is its main competency, to continue in 2012 with mathematics and finish in 2015 with science. Results of the 2009 application in Mexico were published at the end of 2010. Member countries and countries associated to the OECD have taken part. Forty-three countries participated in 2000, 41 in 2003 and 57 in 2006 (OECD, 2005b, 2006, 2007, 2009b).

In terms of design and method, representative samples are used that oscillate between 3 700 and 30 000 students from a minimum of 150 schools in each country in such a way as to create inferences for the country as a whole, but not for regions or states. Two tools were used, the test booklets and context questionnaires. The booklets contain different modules of assessment areas, and their matrix structure allows better coverage of content without the need for all students to answer all test components. There are both open and closed test components. Context questionnaires are directed to the school’s students and principal. Lastly, it stresses that PISA results attempt to facilitate knowledge of the SEN situation and contribute to basing decisions on reforms and education policies which must be undertaken (OECD, 2005b, 2006, 2007, 2009b).

Mexico’s participation in PISA has progressed significantly during these four applications because participation in 2000 was concentrated on reviewing test components and applying the test and was limited to a national sample. In 2003, countries participated more in the preparation of test components and designing the assessment because an extended sample of schools was requested to allow for state and national representation. In 2006 and 2009, efforts were concentrated on including representative samples of entities, participation in the preparation of test components, pilot tests of and correcting the tools, a more complex analysis and extensive publication of results to different audiences involved in student education, as well as teachers’ proposals on classwork based on results of assessments (Diaz et al., 2007; Vidal and Diaz, 2004; OECD, 2005b, 2006, 2007, 2009b).

iv. Teaching and Learning International Survey (TALIS)

The OECD created the TALIS survey with the aim of conducting a comparative analysis on lower secondary education teachers’ characteristics, their professional development, beliefs and attitudes regarding teaching in general and their own practice, as well as the learning setting and working conditions in the context of education systems in different countries. It is therefore believed to contribute assessment elements to the SEN situation.
TALIS is directed to lower secondary education teachers and principals. Currently, 24 countries\textsuperscript{48} from four continents participate and it is open to the possibility of other countries joining in the future. It was applied for the first time in 2008 and the co-ordination of application in Mexico was under the direction of the DGPP. Schools and teachers are selected at random from participating countries. The sample size for each country is 200 schools and 20 teachers per school. The assessment is focused on the following aspects: 1) school management and leadership, 2) assessment of teachers’ work in schools, feedback received by them and the use of assessment results, and 3) profiles of countries in respect to their teaching practices, activities, beliefs and attitudes, and how characteristics of teachers vary\textsuperscript{49} (OECD, 2009\textsuperscript{a}).

The questionnaires are prepared in co-ordination with the OECD by an international group of experts and agencies representing teachers, called the Trade Union Advisory Committee. Questionnaires are answered on paper or online and last approximately 45 minutes. Under no circumstances are the names of teachers, principals or schools released, which makes answers confidential. Results of this survey were published in the Creating Effective Teaching and Learning Environments report: first results from TALIS (OECD, 2009\textsuperscript{a}).

2. PUBLICATION AND USE OF RESULTS

Assessment efforts of this chapter attempt to involve interested audiences: education authorities, schools, teachers, students, parents and the public, to make results of said assessments useful in providing feedback to the SEN and orienting decision-making for its improvement. The greater part of this information is available in SEP and INEE web pages (INEE, 2005\textsuperscript{b}, 2010; Martinez Rizo, 2008\textsuperscript{a}, 2008\textsuperscript{b}; SEP-DGE, 2002).

As seen in the description of the SNIE, the SEP works to reinforce mechanisms for transmitting resulting information in order to ease access and develop indicators. This publication of education is done through the DGPP information portal and other printed or electronic media (SEP-DGPP, 2010). One example of the use of this information and calculated indicators is the annual publication by the SEP on the Education System of the United Mexican States. Key figures.

The INEE has the objective of broadcasting assessment results on SEN and state subsystems in order to provide education authorities feedback to make decisions on education policies, improve education in classrooms and accountability (INEE, 2005\textsuperscript{b}, 2006\textsuperscript{b}, 2010). The INEE assessment task also includes the preparation of institutional reports, databases, technical manuals, search tools, brochures, teachers’ material, research notebooks and long-term development plans, among others. A great amount of this information can be accessed in its webpage\textsuperscript{50}.

Some valuable efforts for the INEE to highlight, which promote the proximity of assessment to classroom practices are as follows: The Explorador Excale is in the Institute’s portal, and a tool which allows content assessed with Excale to be consulted and the percentages of correct responses per subject, grade, topic and sub-topic, as well as access to descriptions of test components. Another effort is the Corpus Excale, a tool applied by the Institute, which allows text written by basic education students to be consulted. Lastly, the Comunidad MAPE is new on the site and a virtual space created for encounters between teachers, principals and technical-pedagogical consultants, which makes Material to Support Educational Practice (MAPE) available, and is developed with results of INEE assessment. Those assessments offer information on curricular content and teaching methods used on the lowest results in some areas of writing and mathematics. In this space, teachers are expected to write their experiences on how these materials are used for planning their classes in schools, supporting student activities, learning more about the subject or working in collegiate groups (INEE, 2010).

Regardless of the aforementioned, sensitising actions still need work in order for educators to consult that information and consolidate a sequence of support leading to the correct interpretation of results (Backhoff, Andrade, Sanchez, Peon and Bouzas, 2006, Martínez Rizo 2006). Furthermore, greater use of the results by scholastic communities and education authorities should be encouraged in order to implement actions to improve education services offered by the NES. Agencies responsible for the use of assessment results are the SEP and state

\textsuperscript{48} Countries participating in TALIS are Australia, Austria, Belgium, Brazil, Bulgaria, Denmark, Estonia, Hungary, Iceland, Ireland, the Korean Republic, Lithuania, Malta, Malaysia, Mexico, Netherlands, Norway, Portugal, Spain, Slovak Republic and Turkey.

\textsuperscript{49} For more details on TALIS, consult the OECD (2009\textsuperscript{a}).

\textsuperscript{50} For more information, please visit http://www.inee.edu.mx

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education authorities, while the only INEE function is to analyse results and orient its appropriate interpretation so education authorities can make pertinent decisions.

The Continuous Statistics System is the proposal reviewed in this chapter, which reports the greatest use of results because they are used by the DGPP to formulate actions for the planning of short, medium and long-term goals, like the Education Sector Programme, for example. Short-term actions are integrated to the annual programme of each responsible unit forming the education sector and in each state. Information obtained through this system and calculation of education indicators is used by federal and state education authorities and officials of other states because they are input for short, medium and long-term planning. Results of the system assessment conducted by the INEE, SEP and international organisations start to become input for the design of medium and long-term public policies of the education sector.

In the same manner, main uses for INEE assessment results are directed to accountability. That means there is a link between the results of assessments and strategic action planning but they need more extensive use in the classroom.

3. POLICY INITIATIVES

Aside from the aforementioned efforts, the SEP has recently requested the orientation and support of national and international experts, and OECD as well, in order to take part in analysis processes of the perspective of education policy to enrich it with an international perspective, and allow better practices related to training for administrative skills, assessment for promoting teachers to positions as principals, outlines for gradual decentralisation of administrative decisions in schools, teachers’ professional training, school management and leadership. This report is an example of that report. Participation in these studies broadens and enriches national perspective and complements internal diagnosis by the SEN. However, these efforts still need to be consolidated and systematic over time (SEP-UPEPE, 2010a).

Actions have been initiated with information systems to create registration systems, such as the National Student, Teacher and School Registry (RENAMEn). The RENAME is a project for the creation of a system with national registry information, whose structure, created with state of the art technology, allows the gathering and administration of large quantities of information, communication with other systems, construction of consultation interfaces of different levels, and creation of processes and collaborative applications. To start with, the project contemplates establishment of a technological and informatics platform as basic support for information systems needed in the education sector (SEP-UPEPE, 2010a).

The entire SEN will gain significant information quality, opportunity and management as a result of this project, and in turn, will allow timely identification of threats and tendencies, which could have an impact on education quality. Furthermore, it will be of help in designing better education policies, or devising more appropriate programmes. Available resources can be taken advantage of more efficiently in administrative levels for correct allocation of funds and orientation of support according to objective and documented needs with a reduction in the budget and human load of current information management.

The RENAME was conceived as an articulating element for information as well as student, teacher and school processes in such a way that relevant, trustworthy and consistent information is available on a permanent basis for assessment, planning and decision-making on different levels of education management. This initiative will allow a teacher registry linked to that of students to be obtained, and carry out activities such as: a) Prospective studies for teacher training, consolidation of services, coverage and more efficient use of resources, b) Identification of teachers’ needs and technical support in schools; c) Creation of a system to provide incentives for teachers; d) Determination of the universe of teachers to be trained; e) Historical information on the trajectory of each SEN teacher; f) Strengthening of information and efforts in the transit of teachers in the SEN g) Counting on teachers’ professional profiles; g) Analysis of the incidence of factors, such as age, years of experience and gender; i) Balancing the proportion of registered in-service teachers; j) More accurate determination of the need to create and regularise positions; and k) Identification of resources to formalise figures supporting school management (SEP-UPEPE, 2010a).
4. CHALLENGES IN SEN ASSESSMENT EFFORTS

Mexico’s participation in international assessment projects has allowed national education results to be compared to that of other countries; learning, applying and testing assessment methodologies allowing assessment processes to be improved, and valid, trustworthy results obtained on the SEN situation and debates propitiated on the country’s education (INEE, 2006⁶, 2010). The country’s participation in this type of project has also an impact on a greater capacity for methodological and technical psychometric aspects for data processing and analysis, which make it possible to update and train teams responsible for projects on a continuous basis (INEE, 2006⁶, 2010). Furthermore, the development of information systems on SEN components has increased. However, there are aspects needing improvement in terms of SEN assessment as a whole, some of which are mentioned below:

Firstly, and in terms of information systems, continue generating adequate controls to know with certainty the number of schools, teachers and basic education enrolment in states, as well as mechanisms used to promote efficient handling and safeguarding of data fed into information systems. Furthermore, foster the use of information systems by personnel of the SEN operative structure to plan their daily work agenda and attention to existing problems or backlogs.

Secondly, promote greater use of database information for more profound analysis to support decision-making and build complex systems that feed diverse SEN components (AEF05; AEM06; UNF02). Currently, there is no central system allowing the collection of student assessments, which could be used by teachers (SEP-DGPP, 2010).

The INEE has substantive, structural challenges in its work. In substantive terms, it should: 1) Establish orientation on where to project its efforts on studies offered, assessment of abilities and the indicator system; 2) Strengthen the indicator system; 3) Determine how to create interfaces with different users, especially teachers, the IES and State Assessment Institutes, preparing reports which are accessible to multiple audiences, 4) Strengthen work of the Directorate of School Assessment (DEE) and, in general, the entire Institute (AEF05; AEM09; RPJ10; SCD04); and 5) Promote greater aperture of its databases for research (UNA03).

Structural challenges include constitution by Law, expansion of its structure allowing it to have greater attributions, such as academic activity and an important function in SNEE articulation (AEF05; AEM09; RPJ10; SCD04). Furthermore, it needs to achieve that education authorities and the public understand that Excale exams have the function of offering an overview of the situation of the SEN to promote significant improvements and facilitate establishment of judgment on education policies, which is something a census is unable to substitute (UNA03; UNS01).

Lastly, Mexico should reconsider its participation in other international assessments, conduct an in-depth analysis of results of those in which it already takes part and extend its functions, given that most efforts are concentrated on operation, not research or analysis (AEM09; UNF02). Furthermore, there should be a systematic review of tests to ensure their correct adaptation to the Mexican context (RPJ10; RPS11; UNA03), and recommendations made by international agencies to the most disconnected education services created to extend coverage in zones of extreme poverty: CONAFE, televised distance education and indigenous education (AEP06). Therefore, the context in which SEN educational services are developed must be considered when comparing the results of assessments of different countries (RPJ10; RPS11).
CHAPTER IV. SCHOOL ASSESSMENT

This chapter shows, firstly, an overview of primary and lower secondary schools in Mexico in terms of their structure, organisation, functioning and size. Secondly, it amply describes proposals and practices in vigour for school assessment in the country. Thirdly, it points out variations in the implementation and articulation of results of this assessment. Fourthly, it approaches the extent of publication and use of results of said assessments. Fifthly, it proposes policy initiatives launched to improve school assessment systems, and lastly, Mexico’s challenges in this assessment component.

1. PRIMARY AND LOWER SECONDARY SCHOOLS IN MEXICO

In the nineties, the SEP started to investigate operating conditions of schools through data gathering forms, which were requested for each school. In 1993, the LGE conferred states with the educational social function of operating SEN schools, with the SEP responsible only for the Federal District of Mexico City (articles 12 to 15, DOF, 22 June 2009). Because of the ANMEB, school appeared to be where learning took place to accommodate interaction between the teacher and student and not only as the teacher’s responsibility (SEP, 1992). This new pedagogical and curricular conception, which stressed the importance of the school and its management, was projected in education policy documents, such as the ANMEB, National Education Programme 2001-2006 (SEP, 2001), PROSEDU 2007-2012 (SEP, 2007d) and ACE (Federal Government, 2008).

Primary schools are classified as follows: a) location: urban schools are in the nucleus of cities with a population of more than 2,500, and rural schools are in towns with less than 2,500 inhabitants; b) by their organisation in: complete, when six grades of primary education are taught and there is a teacher for each grade; incomplete, when they do not impart the complete cycle of primary education, regardless of the number of groups or teachers they have; one-teacher, when they have only one teacher, regardless of the number of grades or groups taught; and complete one-teacher rural, when one or two teachers attend the six primary education grades; and c) by period: morning, afternoon and evening (DOF, 7 December 1982c). Based on the aforementioned, primary schools offer three education services: general, indigenous and community, or “community courses”. General schools are urban or rural, indigenous schools are rural only and have the peculiarity of teaching a bilingual or bicultural population from different ethnic nuclei that exist throughout the country, while community courses are taught by the CONAFE, through the Directorate of Community Education51.

Lower secondary schools offer four education services. General lower secondary education prepares students from 13 to 15 years of age for continuing to upper secondary education. Technical secondary education offers them the opportunity to enter the job market with technological education in industrial, commercial, agricultural, fishing and forestry activities. Televised Distance Learning52 is a service that arose in 1968 in rural, marginalised localities or others with difficult access or a low number of graduate primary education students. It is characterised for its use of televised technology to teach different subjects. Lastly, secondary education, for working people 15 years of age and older who have concluded their primary education, is usually imparted in the evening at general lower secondary schools (DOF, 7 December 1982b, 1982c).

Administrative funding53 of schools is federal54, state55, autonomous56 and private57. Schools with federal support are financed by the federal government and controlled technically and administratively by the SEP and other State secretariats or federal agencies. State - supported schools are administered and supervised technically by the board of public education of each state. Autonomous schools are capable of self-administration and usually receive a subsidy from federal and state governments. Lastly, privately supported schools finance and administrate themselves (SEP, 2009c). The federal government transfers resources to the states to improve materials in schools and pay the salaries of teachers and education workers, which were federal before 1993, as well as payment of federal teaching positions created every year to attend the demand. Additionally, some basic education schools receive the support of government agencies, such as the National System for Comprehensive Family Development

51 The Directorate of Community Education proposes, designs, develops, implants, investigates and evaluates the modalities or services of Community Education from the formative, intercultural, environmental and community development settings. It keeps focuses and conceptual lines updated, which could orient actions of education processes developed by the Council with rural, indigenous and migrant population and marginalised zones, as well as those corresponding to teacher training (CONAFE, 2010).

52 Televised Distance Learning attended 6 569 students when it first started, and in the 2008-2009 school year, that number had increased to a little more than one million. During the 1988-1994 presidential term, there were 2 444 telesecundarias, which have now reached 17, 475 (INEE, 2006; SEP, 2009c).
Furthermore, the SEP heads the management and operation of federal direct support programmes for schools and underprivileged students. In 2001, federal programmes directed to improving schools were created, such as the PEC, which has, as one of its innovations, direct delivery of financial resources to schools. Resources they provide are additional and complementary to those offered by other federal, state and municipal programmes in vigour and destined to schools’ infrastructure and operation. The programme grants this support based on assessment done by the school (PEC, 2010).

At the closing of the 2008-2009 school year, 220 350 basic education schools were registered, 40.2% of which were pre-primary schools, 44.3% were primary schools and 15.5% were lower secondary schools. In primary and lower secondary education, approximately three-quarters of the schools are of basic education level, 40.2% of which are pre-primary, 44.3% are primary, and 15.5% are lower secondary institutions. Approximately three-quarters of the primary and lower secondary schools are state-run (79.2%), followed by state-run schools (79.2%), federal schools (11.8%), private schools (8.9%), and the rest are autonomous. Most of the primary education schools are general (78.6%), 10.1% are indigenous, and 11.3% are community courses, with an enrolment of approximately 150 students per school; 179 students in general service, 85 in indigenous and 10 in community courses. In lower secondary education, half of the schools are telesecundarias (50.8%), followed by general lower secondary schools (35.3%), technical schools (12.9%) and education for working people (0.9%) (SEP, 2009) with an attendance of approximately 179 students per school: 257 students in general lower secondary schools, 392 in technical schools, 72 in telesecundarias and 102 in lower secondary schools for workers (see Annex I).

The organisation of primary and lower secondary schools is regulated by Secretarial Agreements (DOF, 7 December 1982, 1982, 1982), and there are specific guidelines and provisions for schools in Mexico City (SEP, 2009). Overall, senior staff, teachers, administrative personnel, students and maintenance personnel all interact in a school, as do scholastic leaders and the participation of society.

There are differences in school structure and organisation by state related to the size of enrolment, depending on the degree of urbanisation of the locality in which they are located. Urban schools with a student demand justifying that type of location respond to complete organisation. However, in small urban communities, and especially rural locations, there are a large number of small schools, which because of the low number of students enrolled, have one-teacher or complete rural one-teacher, or multi-grade organisation. That is the case of community primary education, some indigenous primary schools and telesecundarias

In that respect, the INEE conducted a study in which almost 90% of private primary schools had very adequate infrastructure conditions, and only three of every one hundred were deemed to have deficient or very deficient infrastructure. In exchange, the situation is quite different in community courses: more than 90% have very deficient and deficient infrastructure, and less than 10% have sufficient or very adequate infrastructure (INEE, 2006).

In multi-grade schools, all teachers instruct students in different grades, which gives rise to the figure of being administrative staff with a group. These schools might have only one teacher for all six primary grades (one-teacher schools); two teachers, each imparting classes to three grades (two-teacher schools); or three teachers, each attending the needs of two grades (three-teacher schools). The Multi-grade Education Proposal [PEM] arose in the framework of the National Education Programme 2001-2006, with the aim of proposing an education model for

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53 For example, the Programa de Desayunos Escolares, Programa de atención a los derechos de la niñez, Programa de Atención a Menores de 5 años en riesgo no escolarizados, and campaigns, such as Niños migrantes no acompañados, Haz que vean lo mejor de ti, Discapacidad-inclusión social, Prevención de adicciones.
54 Social programmes, such as Estancias Infantiles
55 Associations like the Union of Entrepreneurs for Educational Technology [UNETE], Fundación Televisa, the National Association of Self-Service and Department Stores [ANTAD] and the Nacional Monte de Piedad
56 See Chapter 7 for more details on these programmes.
57 Scholastic leaders are the principal, vice-principal and teachers forming the Technical School Board or School Advisory Board in technical secondary schools; School Supervision is integrated by School Supervisors and Heads of Education of Technical Secondary Schools, General Sector and Zone Supervision (primary) or General Zone Inspections (secondary), Special Education Supervision, that includes Support Service Units for Regular Education (USAER), the inspector of physical education, and School Technical Boards. Furthermore, the participation of society setting of each school is formed by the Parent-Association, Social Participation School Board and School Co-op. In lower secondary schools, it includes the Student Society and local academies; and in technical schools, specialised technical staff, assistants, and pedagogical, technological and academic personnel.
Report of Basic Education Assessment Practices in Mexico, 2010

schools with this type of organisation, given that only CONAFE community courses had a pedagogical proposal designed expressly so a teacher would work with several grades simultaneously. The DGDGIE and state technical teams were responsible for coordinating the PEM and various other general SEB directorates also participated by preparing support material and taking charge of teacher education and training. The PEM\textsuperscript{39} started experimental implementation in the 2004-2005 school year in 31 states, and two years later, the school universe was generalised. In the 2007-2008 school year, there were 43 680 multi-grade schools — 44% of the primary universe — including 11 234 community courses, 6 533 indigenous schools and 25 891 general primary schools (INEE, 2008).

In terms of schools’ technological facilities, in the 2008-2009 school year, approximately two-thirds of primary schools and most lower secondary schools had some type of technological platform - computers, Internet connection, video library, EDUSAT network\textsuperscript{39}. In primary education, 63% of the schools had computers, 28% had Internet, 15% had a video library and 5% had the EDUSAT network. In lower secondary schools, 90% had computers, 32% had Internet, 47% had a video library and 61% had the EDUSAT network (SEP, 2009\textsuperscript{c}). Furthermore, progress has been made in expanding school and classroom libraries. In 2004, four of every five urban primary education teachers had a library in their classroom as did three of four rural primary school teachers, two out of three indigenous schools and more than half of the community instructors (INEE, 2008).

2. ASSESSMENT PRACTICES OF SCHOOLS IN MEXICO

In the nineties, publication of the LGE established public school assessment\textsuperscript{a} as an attribution of education authorities. Nonetheless, the link between school assessment and management was not explicit. With that understanding, school assessment has been put into practice as school self-assessment\textsuperscript{a}, rather than external assessment, assuming that does not suffice to have the results of students’ aptitude tests to know how schools function. This stance facilitated the connection between the importance of assessing schools and idea of having a school project, which led to self-assessment being linked to the creation of a school project. In this manner, self-assessment of schools has been looked upon as a continuous improvement strategy.

The LGE saw to it that states would be responsible for operating SEN schools, for which the federation, through its different agencies, provides mechanisms, models, strategies, proposals and instruments for school assessment. Local or state education authorities are responsible for promoting self-assessment of schools, as well as adjusting criteria, procedures and tools to the peculiarities of each entity. School supervisors facilitate the publication of information from educational authorities to schools, and vice versa, and in some cases, they support the school principal in preparing the school project. Lastly, the school principal and teachers are responsible for conducting self-assessments on a voluntary basis (SEP, 2007\textsuperscript{a}, 2007\textsuperscript{b}; SEP-DGDGIE, 2010; SEP-DGEP, 2010).

In this period, the SEP started fostering self-assessment in schools through the DGE by promoting diverse initiatives, which have implied the active participation of schools, the involvement of other protagonists, such as state education authorities and the AEE (Banegas and Blanco, 2005; SEP-DGE, 2002). In keeping with that, in 1995, the School Management Programme was conducted as a macro school improvement programme, which introduced the topic of diagnosing the school project.

Self-managed work of teaching teams was promoted by School Projects in this setting during the 1999–2000 school year and was a new stage of CONAFE Compensatory Programme Training. In that context, the Diagnosis and Planning course was imported to teach teams preparing the work plan called “School Project to Improve Students’ Basic Skills” (CONAFE, 1998).

One of the main problems established in the National Education Programme 2001–2006 was the deficient implementation of an assessment and self-assessment culture. That made assessment and follow-up actions be taken to know how schools, such as the PEC, function and are transformed. DGEP proposals were prepared to improve students’ learning achievement according to the needs of each school. Since then, school management is

\textsuperscript{39} The PEM offers teachers of general primary and indigenous schools accompaniment, consultation and ad hoc material to handle the model. It reorganises teaching for the six primary grades into three cycles, which handle common topics, but have different activities. It offers teachers a manual and a series of didactic guidebooks and worksheets for students, which are meant to propitiate self-teaching. In terms of in-service teacher training, by 2007, six General Updating Workshops, three courses with value for the PnCM, ten videos on good multi-grade practices and three didactic scripts for Enciclomedia had been prepared.

\textsuperscript{39} EDUSAT is a project that started to take shape in the nineties by incorporating televised satellite media to teaching and learning processes. Programming of this network is focused, mainly, on telesecundaria. Schools usually receive the signal through a parabolic antenna and decoder (ILCE, 2006; SEP, 200\textsuperscript{b}).
conceptualised as the planning\textsuperscript{61}, organisation, assessment of processes and results, and characterisation of subjects coordinating and making decisions on school processes, principals and teachers. In this manner, planning is promoted with a strategic focus, which contributes to schools having control and not just reacting to demands of the communities they serve (SEP, 2006\textsuperscript{6}).

The PEC was created in 2001, fed previous experiences and returned to self-management, understood as decision–making, shared leadership, teamwork, flexible practices in accordance with student diversity, participatory planning with a strategic focus, assessment for continuous improvement, responsible social participation and accountability, with the aim of improving the school centre quality\textsuperscript{6} (SEP, 2006\textsuperscript{6}). This programme proposed, through its operation rules\textsuperscript{6}, the need for a school project that included two factors: a Strategic School Transformation Plan [PETE] and the Annual Work Plan [PAT]. The former stipulates that schools diagnose their current conditions through a self-assessment component; the latter allows goals and objectives to be clear and specifies actions to be carried out in a school year. The PETE specifies its short-term operation in the PAT (PEC, 2010).

Since 2006, diverse federal programmes other than the PEC, such as Safe School [PES]\textsuperscript{60} and Full Time Schools [PETC]\textsuperscript{61}, use a Strategic Plan as an entrance requirement for schools (SEP-DGDGIE, 2010; SEP-DGEP, 2010), which adopts different names, depending on the programme and states in which it is requested: PETE, School Project, Strategic School Improvement Programme, among others. Hence, self-assessment models proposed by federal programmes have been used for school planning and implanted in 40790 PEC schools, 24 733 PES schools and 2 000 PETC schools.

Since 2000, added to previous efforts to develop a self-assessment culture for schools, the DGEP has developed a more robust and disseminated group of proposals, which are self-assessment exercises with a formative purpose, available to schools, to identify the strengths and niches of opportunity of school practice–conditions, processes and results. They also allow substantive reinforcement and improvement actions to be projected. For example, “Mexican public basic education schools. Some aspects to consider in school self-assessment” (SEP, 2002\textsuperscript{6}) are; “Just how good is our school? Adaptation of the main performance indicators for Self–Assessment in Basic Education Schools” (SEP, 2003\textsuperscript{3}). “How can I improve my school? Some aspects to consider in their self-assessment” (SEP, 2007\textsuperscript{7}). Furthermore, in co-ordination with the AEE, the DGEP has developed a school assessment system, later diffused by diverse education authorities, until arriving at schools responsible for developing said systems. For example, a quality management Self-Assessment System for schools (SEP, 2007\textsuperscript{7}), and the National Accreditation System for Basic Education Schools (SEP, 2009\textsuperscript{8}) and as a current policy initiative, which has only a frame of reference.

Together, these proposals have the objective of granting schools an analysis methodology of its situation to find factors susceptible to improvement and develop strategies to rectify them. In all cases, a basic dimension of social participation is incorporated, which attempts to know opinions of education protagonists on different aspects of schools\textsuperscript{62}. However, the manner in which these proposals are used and the needed modifications carried out is up to schools, according to the participants.

\textsuperscript{60} The PES points to the strengthening of strategies and actions that promote a risk prevention culture in schools supported through the development of citizenship skills in students and the construction of democratic settings in public schools through the school curriculum, school management and social participation. The programme is national and contrived with formalisation of the signing of Coordination Agreements with state governments through State Secretariats of Education or their equivalents. In the Federal District, it is conducted in the framework of internal coordination guidelines. As a priority, it is directed to public basic education schools located in municipalities with the highest crime rate in all 32 states, though public schools in other municipalities can participate if they recognise the existence of conditions affecting the safety of the school community and want to promote measures to prevent insecurity and violence. Participating schools are offered training, advice and education material (DOF, 29 December 2009).

\textsuperscript{61} The PETC proposes extending basic education students’ learning opportunities, meaning those dedicated to achieving purposes, studying content and promoting lines of work, by gradually extending the school schedule to 1 200 hours of yearly classes. This programme has national coverage and states willing to take part are incorporated to it. It is directed to public basic education schools, preferably to those attended by an underprivileged population in the marginalised, indigenous or migrant urban context and those with low results in education or already operate with an extended schedule. Resources are assigned to participating schools, which can be used to update personnel, accessories, material, support services for students, hiring of support personnel and improvement of school spaces (DOF, 30 December 2009).

\textsuperscript{62} For that reason, different data gathering techniques are used, such as: 1) Reflection groups, who ask specific questions on parents’ opinion, for example, the degree of satisfaction regarding what their children learn, changes seen in their children’s work, etc. (CONAFE, 1998; SEP, 2002\textsuperscript{2}; SEP, 2007\textsuperscript{7}), 2) Structured forms or sheets to promote analysis by teachers and principals on how much parents participate in school activities (SEP, 2006\textsuperscript{6}). 3) Gradual description of indicators or standards on the relationship of parents, teachers and principals and degree of parents’ motivation to become involved in learning and school life. These help teachers and principals to be constant and propose measures for improvement, if necessary (SEP, 2003\textsuperscript{3}; SEP, 2007\textsuperscript{7}; SEP, 2007\textsuperscript{7}). 4) Use of questionnaires with surveys or interviews to know the opinions of protagonists on different aspects of the school. It is suggested that parents, students and teachers use a self-administered questionnaire with statements that are assessed on a five-point scale. A structured interview script is suggested for the principal (SEP, 2007\textsuperscript{7}).
Because of its voluntary nature, there is no published proof of its implementation or follow-up accounting for its results, impact or the lessons learned, which are derived from their use in schools. There is only evidence of what 763 schools have implanted the Self-Assessment System for schools in the states of Chihuahua, State of Mexico, Hidalgo, Queretaro and Tlaxcala (SEP-DGDGIE, 2010; SEP-DGEP, 2010).

In 2005, according to the Internal Regulation of the SEP (DOF, 11 October 2006), the DGDGIE also promoted self-assessment processes in co-ordination with the INEE and DGEP, especially in the establishment of guidelines for assessment of new institutional management models and school performance standards.

Since its creation, the INEE, through the DEE, has developed a group of activities, which contribute to the assessment schools in two different manners. The first consists of conceptual and methodological tools, which could be implemented by the school community - supervisors, principals, teachers, students and parents (INEE, 2005b, 2006d, 2010). The second involves studies on Terms and Conditions of the Educational Offer [COE] coordinated by its management with the collaboration of the AEE and schools.

The conceptual and methodological tools consist of instruments or a series of instruments for self-assessment, which facilitate analysis of conditions in which schools work. The DEE has also fostered models to assess schools through self-assessment indicators and external assessment, from a perspective of integration of the range of susceptible assessment factors inside these schools (DOF, 8 August 2002; INEE, 2005b, 2006d, 2010; Martinez Rizo, 2008b). The INEE has diffused these tools and they are available to the public. As with DGEP self-assessment proposals, the INEE has not taken part in implementing these tools, given that it is not their responsibility and to date, no proof of it has been published by schools (INEE, 2010).

The institute carries out studies on the COE, which respond to a school concept from the perspective of assessing the SEN. These efforts are translated into data gathering by means of context questionnaires directed to parents, principals, teachers and students, and applied at the same time as the Excale. It also conducts other COE studies based on the LGE, which establishes that education authorities are obliged to create conditions for fully exercising the right to education (Article 32, DOF, 22 June 2009). Nonetheless, these conditions are not in operation given that School Organisation Manuals contain only very general outlines (DOF, 7 December 1982ª, 1982ª, 1982ª). As a result, the INEE focuses these studies on gathering data about specific aspects of school COE, such as the sufficiency6 and pertinence of didactic material, quality of education infrastructure, which ensures the physical wellbeing of students, assessment of resources – human, material, financial and organisational6 and school processes – teaching, management, teacher training and relationship between the actors (INEE, 2005b, 2006d, 2010; Martinez Rizo, 2008b).

In summary, federal authorities are currently focusing school assessment in Mexico on the development of school project proposals, such as the School Project for improvement of basic CONAFE skills, the PETE of the PEC, proposals and integral self-assessment systems of the DGEP, DEE self-assessment tools and studies on the COE. All these efforts, with training purposes, have been created so schools detect their strengths and niches of opportunity to generate improvement strategies voluntarily.

It should be added, that while these efforts are directed preferably to public basic education institutions, COE studies also include private schools. Furthermore, some private schools have opted to join quality accreditation outlines, such as the model operated by the National Confederation of Private Schools [CNEP]. This model is still incipient but could expand in the future, especially if education authorities give value to this type of accreditation, which simplifies the procedure to which private institutions must adhere (SEP-DGAIR, 2010).

The characteristics of school assessment efforts are shown in detail below.

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6 Human resources considers that teachers, administrative staff and support personnel, materials, basic services to which schools have access, infrastructure and didactic and technological material, financial material, resources granted by the state for school operation and those the school obtains for its operation and organisation resources contemplate the composition of groups and school.
A) SCHOOL PROJECT

SCHOOL PROJECT FOR THE IMPROVEMENT OF BASIC SKILLS (CONAFE, 1998)

The organisation of teachers’ self-managed work teams was promoted through School Projects as part of the CONAFE Compensatory Programme Training actions, by imparting the “Diagnosis and Planning” course aimed at updating teachers’ teams, probing awareness of education problems in their zone and drawing up a work plan for a School Project to improve students’ basic skills.

This work plan, directed to rural teachers, was based on awareness of identification of the following components: 1) What is the School Project?; 2) What changes with the School Project?; 3) What is the school’s mission?: 4) What did our students not learn?; 5) Where do problems in the school start?; 6) What do we teach?; 7) Why are we like this?; 8) The mission of our project; 9) The initial work plan; 10) Our School Project; 11) What do the results of the exams tell us?; and 12) Adjustment to our work plan.

STRATEGIC SCHOOL TRANSFORMATION PLAN (SEP, 2006b)

The PETE, based on the School Planning Model or Strategic Education Management, is a tool that fosters the initiation of school transformation processes, allowing education workers to have a general overview of the main lines of work and medium-term results to be reached. Furthermore, it establishes the base strategic reference for schools, in terms of the maximum scope of proposals and commitments for which they are responsible, considering their own individual programming and budget. This tool needs the school to travel in a general direction and establish a series of components to integrate self-assessment, school mission, vision, values and commitments; objectives, strategies, goals, indicators and activities; PAT; follow-up and assessment; pedagogical and financial technical report and PAT for the next school year (SEP, 2006b).

For self-assessment components, it is established that a basic education school is constituted as an institution dedicated socially to teaching with the purpose of training students and contributing to their development as citizens, where objectives, actions and practices with dynamic interaction and articulation coexist. In the same manner, they can be distinguished and classified according to their category: pedagogical, administrative and organisational, or community social type. This distinction allows observing that there are dimensions and areas or plans of action inside the school and its processes, which differ and are complementary.

Self-assessment can be initial, formative and final. Each of these types of self-assessment contributes to identification of key issues that have to do with what students achieve, or not. Initial self-assessment is done when the quest to improve the service offered is undertaken, which is why it is done only once with the recommendation that it be applied at the start of the school year. Formative and final self-assessment corresponds to moments offering valuable information to enrich or rectify group decisions taken during and at the end of the school year. For example, the PEC has standards focused on the quality of education, some related to processes to measure progress as long as the PETE or its equivalent is executed, and referred to as management, teaching practices and social participation in the school (SEP, 2006b).

B) SELF-ASSESSMENT PROPOSALS

MEXICAN PUBLIC BASIC EDUCATION SCHOOLS. SOME ASPECTS TO BE CONSIDERED IN SCHOOL SELF-ASSESSMENT (SEP, 2002a)

This proposal consists of the preparation of a brief self-assessment guide. Its objective is to offer supervisors, teachers and principals some basic references on the importance of self-assessment to identify the strengths and weaknesses of schools and establish measures for improvement. The document stresses that self-assessment should be an authentic and voluntary exercise, or it could become an administrative procedure. Furthermore, it introduces a group of indicators for school assessment classified in five areas: 1) scholastic achievement, 2) school setting, 3) school administration and management, 4) classwork and 5) infrastructure and material to support teaching. Lastly, it specifies stages in the school self-assessment process to promote its implementation: a) comparison of academic results, b) identification of strengths and weaknesses, c) establishment of priorities, d) identification of causes, e)
definition of the plan of action, and f) co-ordination, follow-up and assessment. This self-assessment guide was widely distributed in schools with a circulation of 10,000 copies (Banegas and Blanco, 2005).

**HOW GOOD IS OUR SCHOOL? ADAPTATION OF MAIN PERFORMANCE INDICATORS FOR SELF-ASSESSMENT IN BASIC EDUCATION SCHOOLS (SEP, 2003)**

This proposal is an adaptation by the DGEP of a self-assessment model developed in Scotland for basic education schools and was adapted to SEN reality. The document gives the definition and purposes of a self-assessment process, the assessment proposal’s methodology – criterion-based assessment, the tool for its application and procedure – and some final considerations to promote its implementation. Criterion-based assessment fall into seven areas: 1) application of the curriculum, 2) teaching and learning, 3) achievements, 4) support for students, 5) identity and school or organisational setting, 6) resources and 7) management, leadership and guarantee of quality; for 27 performance indicators defined explicitly in the document. The status of indicators can be classified in two performance levels: optimum and deficient, which are described for each indicator.

With that, those in charge of the assessment are requested to mention problems needing immediate attention and areas in which they can commit to improving, considering the school’s action margins. This document was widely circulated among supervisors throughout the country with 40,000 copies printed for its distribution.

**HOW CAN I IMPROVE MY SCHOOL? SOME ASPECTS TO BE CONSIDERED FOR SELF-ASSESSMENT (SEP, 2007)**

The framework of this initiative includes the main characteristics of Mexican public schools with the highest academic results, presented as a proposal in 2002, with the aim of orienting reflection and diagnosing the scholastic situation in each school. This updated proposal on what was done in 2002 incorporates the following sections: a) What is self-assessment? b) What can be done to improve it? c) Characteristics of the best schools and d) How is self-assessment done in the school? Experiences and knowledge that have to do with characteristics of schools having good results are also shared and organised according to the dimensions or areas of educational achievement, school setting, administration and school management, classwork, infrastructure and support material for teachers and participation of parents. Lastly, 27 performance indicators are added, which are adapted from the Self-Assessment System developed in Scotland by education supervisors of that country, and organised according to the dimensions of school performance. One hundred thousand copies of this document were distributed in schools.

**SELF-ASSESSMENT SYSTEM IN SCHOOLS FOR QUALITY MANAGEMENT (SEP, 2007)**

The *Self-Assessment System for quality management in schools* is based on a self-assessment guide whose objective is to facilitate development of the self-assessment process in the framework of the National Total Quality Model of Mexico in its educational version. It is designed with the intention of supporting establishment and distribution of the systematic school self-assessment exercise as a diagnostic tool and reorientation of education in the classroom and school.

This guide presents the different actions in detail, sequenced according to logical and chronological criteria, for correct implementation of the system in the framework of the National Total Quality Model. In this manner, adoption of the proposal allows the school community, mainly teachers and principals, to carry out a systematic self-assessment process to identify its strengths and weaknesses, and based on that, establish a strategy to face specific problems. The self-assessment process has four phases:

- **Sensitisation:** Its objective is to create interest and commitment in members of the education community to take part in the quality management culture and participate voluntarily in the self-assessment process. This stage takes place in two sessions, with a facilitator presenting the content, allowing collective reflection on education quality, advantages of school self-assessment and the *National Total Quality Model*. This model is used to manage quality in all types of organisations and is adapted to the context of basic education.

- **Formation of the self-assessment team:** A self-assessment team formed by members of the education community, which is responsible for joint co-ordination of data gathering activates and analysis and interpretation of that information. Team members are selected with criteria set forth in the guide.
c. **Evolution of self-assessment:** Consists of data gathering and analysis for diagnosing the school. Participation and commitment of the self-assessment team is the core to guaranteeing that activities are carried out with the required systematisation and technical level. The team identifies strengths and weaknesses of each school, prioritises niches of opportunity and prepares a self-assessment report, through which it invites the education community to become part of improvement groups.

d. **Preparation of the improvement plan:** Its purpose is to promote continuous improvement in the school with two objectives. The first is to constitute and form groups to improve knowledge and appropriate handling of quality management tools with the aim of identifying causes of and solutions to problems in the diagnosis. The second is for each group to design one or various improvement plans and be responsible for its introduction, follow-up and assessment.

The proposal includes specific recommendations for the introduction of each stage. Criterion-based assessment fall into eight areas: 1) Users, 2) Leadership, 3) Planning, 4) Information and knowledge, 5) Personnel, 6) Processes 7) Social responsibility and 8) Competitiveness of the organisation. These are quantified through confirmation and weighed. The maximum score for a school is 1 000, of which the first seven criteria can ascend to a maximum of 700 points, while the last could reach 300 points. Data gathering tools include a self-assessment questionnaire and other questionnaires for students – starting with grade five of primary education – teachers, support staff, parents and management, as well as guides for the analysis of quantitative indicators. Complementary documents include guides for the introduction and preparation of an improvement plan. Furthermore, a training and advisory strategy aimed at State Education Systems is conducted. ([SEP, 2007a], [SEP, 2007b]; [SEP-DGEP, 2010]).

This proposal, published in a collection of five books, was distributed to all primary and lower secondary schools in the country. The SEP recommended that education authorities introduce a strategy to foster use of the system in state schools. ([SEP, 2007a], [SEP, 2007b]; [SEP-DGEP, 2010]).

C) **SELF-ASSESSMENT TOOLS**

Self-assessment proposals for school resources and processes developed by the **DEE** are intended to provide tools needed to support processes for diagnostic\(^6\), formative\(^6\) and summative\(^6\) assessment, making it possible for education protagonists to judge the state of schools and propose guidelines for undertaking improvement actions at a school level. These efforts are based on the conviction that schools are competent agencies for promoting and conducting review processes or self-study.

These tools are easy to apply and process, which favours their use by school communities. They include application manuals with information on the theoretical foundation sustaining the tool’s design, considerations and recommendations for its application, grading procedures and interpretation of the data gathered and activities suggested for the use of assessment results to improve schools (Aguilera, 2004; Benitez, 2004; Figueroa, 2004, Gutierrez, 2004; INEE, 2010; Ruiz, 2004).


These publications contain a series of questionnaires, which explore diverse aspects of the organisation and functioning of schools and are directed to different education protagonists who participate directly in the school: supervisor, principal, teachers, students in the last three grades of primary school and the parents of those students. The questionnaires contain test components with closed response options associated to an ordinal scale of “agree or disagree” with aspects pointed out. Schools that decide to apply them are in charge of them and it is recommended that they be done only after protagonists have enough information on how they function. The scoring procedure is specified in the corresponding manual. Furthermore, orientation is given on interpretation of results and their
relevance specified for the designing of actions contributing to improving the organisation and functioning of the school. These tools have been broadcast by the INEE and are available to the public.

D) STUDIES ON CONDITIONS OF THE EDUCATIONAL OFFER (COE)

In 2006, updating the INEE Master Development Plan was defined to assess school resources and processes, and assess pre-primary, primary and lower secondary levels progressively by following the approximate cycle of Exscale tests. That cycle combines large and small-scale studies on resources and processes called COE studies drawn from DEE assessment projects. These studies include both large-scale studies with their nationally representative samples and small-scale studies to probe findings of the first, with an average participation of 20 schools (Martínez Rizo, 2008).

School participation in these studies is voluntary. Criterion-based assessment are based on regulations and official curriculum of the organisation and functioning of schools. They are selected according to study goals, and assessment tools are based mainly on structured observation guides and questionnaires. The tools are sometimes self-applied but require the participation of an appicator on other occasions.

The INEE and AEE coordinates data collection. The AEE is responsible for selecting and training appicators and gathering information, while the INEE offers orientation on procedures to ensure fulfilment of technical standards and is responsible for supervising it. School principals advise the school community on the application of an assessment and facilitate access to installations and resources needed to conduct it. Furthermore, they take part by informing on the school’s conditions, pedagogical practices and management, as well as the professional profile of teaching and administrative staff. Results of these assessments are published in assessment reports and are available to the public in printed or electronic versions (INEE, 2005, 2006, 2010). Some examples of these studies are: 1) Infrastructure in Mexican primary and lower secondary schools (Garcia, Benita, Huerta, Medina and Ruiz, 2007), and 2) Parent-school relationship in Mexican lower secondary schools (Huerta, 2009). These studies are described below.

Infrastructure in Mexican primary and lower secondary schools analyses information on infrastructure and assets of basic and lower secondary schools in the country. To that end, three versions of the Guide on the comparison of assets were created, one for all basic education services, another for distance learning and yet another for the other lower secondary services. It has six sections: 1) Identification data, 2) Basic services, 3) Existence of school infrastructure and school spaces, 4) Appraisal of school infrastructure and installations, 5) Existence of school equipment, and 6) Appraisal of classroom conditions. This tool was applied to a stratified random sample formed by 2 774 basic education schools and 2 368 lower secondary schools. Data was gathered by following that of the 2005 Exscale application. Results of the study were published in the corresponding assessment report, which contains a series of recommendations oriented to planning education actions and creating social policies to improve the infrastructure and equipping basic and lower secondary school throughout the county (Garcia et al, 2007).

The study, Parent-school relationship in Mexican lower secondary schools, reports results of that relationship in the country’s lower secondary schools and reports information on school processes, particularly the exercising of leadership roles, pedagogical practice, parent-school relationship, organisation and functioning of collegiate agencies, school discipline and expectations for the educational future of students. It was conducted from 2005 to 2008 in 20 public lower secondary schools with general technical and distance learning services. The study had a qualitative focus and case study method. Twenty-six tools were used – individual and group interview guides, observation and document analysis guides, registration cards and questionnaires – and considered different education protagonists. The assessment report and conclusions are oriented to reflection on education policies and measures for improving the power of all those taking part in education (Huerta, 2009).

3. VARIATIONS IN THE IMPLEMENTATION AND ARTICULATION OF RESULTS

In terms of variations in the implementation of self-assessment practices described in the previous section, DGEP proposals are susceptible to application in different contexts and education services, though no evidence is available on differences in its implementation, as mentioned earlier. The DGEP a considered a follow-up strategy for schools requesting advice or feedback on their processes, but the assessment’s voluntary nature did not oblige

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64 Technical standards are specified in the document, Technical standards to assure data gathering data.
schools to inform education authorities on the process and results (SEP-DGDGIE, 2010; SEP-DGEP, 2010). As for the Self-assessment system in schools for quality management, it was proposed that each state determine the application outline for their schools, training and supervision structure, compulsory nature of its use and articulation with other state education policies, as well as the adaptation of assessment tools in adherence with state requirements (SEP, 2007a, 2007b; SEP-DGDGIE, 2010; SEP-DGEP, 2010).

The DGEP recommends that the simplest self-assessment proposals, such as How good is our school? (SEP, 2003b) and, How can I improve my school? (SEP, 2007b), be implemented in schools not having a fully organised infrastructure and academic-administrative performance. On the other hand, use of the Self-assessment system in schools for quality management (SEP, 2007b), since it involves more extensive instrumentation, is recommended for schools with complete infrastructure and organisation (SEP-DGDGIE, 2010; SEP-DGEP, 2010).

The DEE has conducted studies on different basic and lower secondary educational services, in some cases with differentiated tools, depending on the service and level of education. Self-assessment proposals are flexible, can be applied to different contexts and education services and involve the participation of different protagonists, which is why adaptation to assessment proposals determined by each school and its conditions are suggested.

In reference to the articulation of DGEP self-assessment proposals with other forms of assessment, they all include students’ school performance as an element. Some include Spanish and mathematics exams, and assessment is promoted in the most recent analysis on results of students’ learning, derived from application of the ENLACE and teachers’ exam obtained by means of the PNCM Professional Preparation factor, as input on the school’s situation and creation of plans for improvement. Some DEE studies have been useful in complementing or interpreting the results obtained in more detail by applying Excale exams to detect the situation of the SEN. However, there is no explicit link to other types of assessment.

Because of these efforts, other activities have been carried out with the objective of training personnel responsible for implementing assessment processes because the DGEP and some AEE offer information in manuals and operative guidebooks, and give advice to school administrative staff and sectors requesting support for self-assessment actions. The aforementioned is to promote collegiate work involving the participation of everyone in the school. In some cases, supervisors train staff members (SEP-DGDGIE, 2010; SEP-DGEP, 2010). The DEE has also trained AEE personnel to strengthen their competencies in school assessment areas, particularly in respect to the understanding and handling of existing statistics and results of assessments to diagnose the SEN’s situation of every state in the country (INEE, 2006b; Martinez Rizo, 2008b).

4. Publication and use of results

Proposals and support tools for self-assessment of schools have been widely publicised. However, there is no information on the number of schools implementing them or with systematisation of the results of those assessments, partially due to its voluntary and formative character since schools are not obliged to report results to education authorities. The degree to which results are released in school communities is not known either (INEE, 2005b, 2010; Martinez Rizo, 2005, 2006, 2008b; SEP, 2002b; SEP-DGEP, 2010).

Results of studies conducted by the DEE have been delivered to federal and state authorities and made available to the public in printed and electronic versions (INEE, 2005b, 2010; Martinez Rizo, 2005, 2006, 2008b; SEP, 2002b; SEP-DGEP, 2010). Since 2003, the INEE submits results of all assessments conducted to the highest authorities in the country and the institute’s Advisory Council, formed by heads of the AEE. Furthermore, in a less regular manner, it includes, through an invitation to education authorities, supervisors, principals, directors of union sectors, representatives of parents, legislators, business leaders and mass media (Martinez Rizo, 2008b). To date, however, there is no proof of systematic mechanisms to promote the use of results by education authorities.

In that sense, the need has arisen for self-assessment results to be publicised: 1) among schools so they explore the analysis of their situation more extensively and draw up improvement plans to attend their main weaknesses; 2) to education authorities in order to launch support actions, such as incentive programmes or by providing input to

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65 The President of the Republic; education committees of the Senate and House of Commons; the head of the Directorate of Education, who chairs the Board of Directors, and all its members; officials of the Undersecretary of Basic Education; the Planning and Assessment Unit of Education Policies, the Federal Administration of Education Services of the Federal District, the National Council for Education Development, and other federal authorities.
schools with deficiencies; and 3) society in general, for accountability and to foster awareness of the need to support education. Furthermore, each school must externalise the need to support education and communicate the results of these assessments to their students’ families along with improvement plans, for purposes of accountability, monitoring and support (INEE, 2005b).

5. POLICY INITIATIVES

Currently, school assessment efforts concentrate on developing school management standards as a base for perfecting school self-assessment models and proposing an external self-assessment model. Therefore, since 2009, the DGEP has been working on the National Accreditation System for Basic Education Schools [SNACEEB], based on a systematic assessment model, which allows appraising the quality of settings, components and functions of basic education schools.

The AEE and technical agencies of different states in the country have taken part in this system and received international advice. Its objective is “promote a continuous improvement policy for Mexican basic education schools to increase the quality of their processes and results through external public recognition by those that fulfil a group of previously defined minimum standards, which were agreed to be essential factors of quality” (SEP, 2009d, p. 51).

School participation is voluntary and a temporary process guaranteeing that conditions of components are permanent, and through which the quality assessment process was created during a determined period. Self-assessment processes or strategies for progressive improvement of quality are incorporated to its procedures, and the intervention of an external accrediting organisation is contemplated, which is recognised through the competition and consensus of different competent education authorities. The dimensions taken into consideration reflect institutional components through which schools are assessed: institutional philosophy, management of senior staff members, teachers, support and administrative personnel; teaching and learning processes, and social bonding.

A concrete challenge of the SNACEEB design is to achieve its consolidation and implementation. To that end, indicators must be submitted to a national judgement stage, the final proposal prepared on standards to be met, as are the rest of the operative documents, which allow the system to be launched. Furthermore, a specific law should be passed, which regulates normative and operative attributions of the system’s functioning with the aim of said law consisting of a functional, effective and transparent legal framework through which transformation required by the state is set in motion to offer quality education (SEP, 2009d).

6. CHALLENGES OF SCHOOL ASSESSMENT

School assessment is growing progressively in Mexico through proposals focused on the development of assessment tools and indicators for its implementation by schools. Regardless of these efforts, it is agreed that this setting continues to be a clear niche of opportunity for basic education SNEE (INEE, 2005b, 2006a, 2006b, 2006d, 2010; Martinez Rizo, 2005, 2006, 2008b; Santizo, 2009; SEP-DGAIR, 2010; SEP-DGDGIE, 2010; SEP-DGEI, 2010; SEP-DGEP, 2010). Some of the challenges involved in school assessment are mentioned below.

Initially, there should be awareness of the usefulness and impact it has on launching proposals and tools described in the chapter. This implies knowing how many schools make use of these efforts and the main problems detected, as well as the systematisation of information derived from its implementation.

Secondly, expand training for self-assessment of school personnel, which implies strengthening the co-ordination of state support to schools and a systematic mechanism of interlocution with federal authorities.

Thirdly, build benchmarks to assess school quality in terms of conditions for teachers’ education offer, infrastructure and pedagogical processes, as well as counteracting the lag in infrastructure through a strategic investment plan (AEF05; AEM09; RP10; RPS11). Currently, only studies conducted in schools in critical condition are available. Furthermore, systematic assessment of the physical and educational conditions need assessing, as does taking advantage of population compensation to make decisions to offer better service (AEF05). Therefore,
value-added models need to be created, which would allow isolation of the school’s contribution to student performance, separating contextual factors unrelated to classroom and school control (OECD, 2010).

Fourthly, those involved in assessment must assume that results of students’ learning comprise one of the elements needed to establish judgment on the functioning and quality of schools, but that it is not the only thing (AEA08; AEP05; AEM06; AEM09; RP110; SCD04; UNP02; UNS01). In that respect, it has been found that the inequality of students’ results is due to the combined effect of school and environmental factors.

Fifthly, foster an assessment culture for schools. There are different standpoints, in terms of schools’ proposals, responsibilities and those involved in assessment, and it is coincidental that school assessment should be conducted with primarily formative purposes, with self-assessment considered as one of its main components (SEP-DGEP, 2010; SCD04; UNS01). It is proposed that self-assessment and benefits of accreditation that include a self-management element be promoted in schools, which requires more dissemination of proposals and external advice. In that sense, an outline is proposed in which the DGEP and INEE would govern and provide self-assessment parameters, create models, direct operative and usage aspects, while accreditation would correspond to each state. The DGEP would provide the basic accreditation principles and schools would be responsible for implementing them (SEP-DGEP, 2010; AEA08).

Additionally, school assessment with formative objectives must be promoted. This proposal is derived from the premise that schools should be assessed and supported but with the understanding that they are different and have different dynamics, with contexts, history, relationship with the community and a particular response capacity; which means that seeking normalisation is not feasible (SCD04; UNS01). Therefore, assessment should allow schools to make the decision on how to resolve their specific education needs with their students, teachers and the community linked to them. The DGEP and INEE can help schools in this process with conceptual and methodological tools and results of COE studies (SCD04; UNA03; UNS01).

Sixthly, promote the use of school assessment results by school communities, teachers and education authorities in order for them to sustain decision-making and the launching of actions to improve schools’ conditions and performance. Therefore, school networks should be formed to foster collegiate work, discuss common problems and, based on that, originate lessons learned and share successful practices. Furthermore, policies should be formulated and directed at improving education services offered by schools and as input for conducting NES assessment (INEE, 2010).

Lastly, it is important for education authorities to establish creative manners of fostering school assessment in the country, considering its particularities and assuming that a diagnostic assessment of schools at national level involves costly development and a complicated application of logistics. This implies that what is already developed and established should be articulated: Who should make these decisions? Which type of information on schools is needed at the central administration level? (SEP) Which information is needed at a state, regional or school zone level? Which information is needed at a school or parent level? (SEP-DGEP, 2010). The aforementioned is seen as a challenge of the agency articulated by the SNEE, mentioned in Chapter 2.

66 Unlike what should occur, schools do not compensate for disadvantages of students coming from the poorest households, but reinforce them instead, given that students with the most unfavourable situation at home attend schools with the greatest needs. Some multi-level models have found that “...approximately 10% of the variance in the most egalitarian countries is attributable to schools, which extends to 50% in those characterised by the greatest amount of inequality. In Mexico, figures based on results of the PISA attribute one-third of the total variance (35%) to schools, and there are solid reasons to think that it should be higher, probably 50%” (INEE, 2006, p.122).

67 With this approach, a visit to the school by a consulting group would be considered to know what takes place there and, following that, offer feedback with a diagnosis on weak and strong points, projecting them in a support programme. The consulting group, formed by two or three persons with a defined profile, would be capable of a four-day to two-week visit, depending on the size of the school, to detect its performance, operation by the principal, support given to continuous teacher training and the school’s self-assessment process, among others (OECD, 2010; UNS01).

68 For example, schools that use the Self-Assessment System of schools for quality management detect strengths and niches of opportunity without reaching the creation of improvement groups and the subsequent creation of plans to eradicate detected weaknesses (SEP-DGEP, 2010).
CHAPTER V. TEACHING STAFF ASSESSMENT

This chapter includes first, an overview of the teaching staff in primary and lower secondary education in Mexico in terms of their initial training and during their service, and the dimension of the job itself. Second, it includes a description of current teaching staff assessment practices in the country in relation to their trajectory. Third, it includes implementation and articulation variations of those assessments' results. Fourth, it includes degree of publication and use of assessment results. Fifth, it includes policy proposals and lastly, the challenges Mexico is facing regarding teaching staff assessment.

1. PRIMARY AND LOWER SECONDARY EDUCATION TEACHING STAFF IN MEXICO

Article 123 of the Constitution and the Federal Law for Public Servants (DOF, 28 December 1963) comprise the labour laws for State workers, which includes public sector basic education teachers. Teachers are hired and promoted as per guidelines of the Regulations of the General Working Conditions of SEP Workers (DOF, 20 January 1946) and Promotion Regulations for SEP Workers (DOF, 14 December 1973). There are Working Conditions Rules in each state, which are also used for accessing managing positions. Hiring teaching staff is the exclusive purview of State Education Secretariats or federal SEP in the Federal District.

In 1972, one of the most notable changes occurred when the teaching career became equivalent to a high school diploma, allowing graduates access to higher education degrees. In 1984, Normal Schools became public Higher Education Institutions (IES) with the mandate of forming basic education teachers in different programmes, elevating this training to a university degree; therefore, upper secondary education degrees at tertiary level were requisite for admittance. Ever since, these institutions offer 4-year degrees in early childhood education, pre-primary, primary and lower secondary education and different specialties: physical education and recreation, arts education and special education (UNESCO-OREALC, 2006). Most schools offer more than one university degree. Teachers who did not have a university degree were offered 4-year training at the National Pedagogical University (UPN), an institution founded in 1978.

There was a noticeable decrease in normal school enrolment after the implementation of the high school diploma requirement. In early 1990, enrolment was 109 thousand students, which represented a 67% decrease in relation to the previous decade (OCDE, 2004). Demand, however, surpassed the jobs available in some states.

In 1999, there was a curricular reform and new study plans came into effect for a bachelor's degree in Preschool Education, Primary and Lower Secondary Education and during the 2004-2005 school term the Primary Education with an Intercultural-Bilingual Focus and Special Education degree, which lasts 8 semesters. Consequently, Secretariat Agreement number 261 (DOF, 8 September 1999) was issued, which has been in force for normal education for preparing basic school teachers and it establishes criteria and norms for learning assessment of the bachelor's degree in basic education. This agreement is described in detail in the following section.

Regulation policy began in 2001, which, through some criteria and recommendations, curves the excessive number of students wishing to enrol for some of the degrees offered by normal education. This was to prevent graduating too many people in relation to teaching positions available. As consequence, Private Normal Schools

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69 Hiring is purview of state authorities. There is a state follow-up council formed by the SNTE, Federal Office for Educational Services (OSFAE) and State Educational Secretary assigned by the PRODET. In addition, the position given to what person is published on Internet and the state assigns the teacher to a school. PRODET identifies the state needs in terms of the creation of new services, teaching and administrative posts as well as the buildings.

70 The Organic Law on Public Education came into effect in 1867, which resulted in two education-related actions: the creation of the Normal School for Teachers' initial training, which to date are special schools that train teachers in pre-primary, primary and lower secondary levels, and the basis were formed for the consolidation of the National University. Normal Schools have been emphasizing the training of urban and rural teachers and have experienced a particular historical development. The initial education of teachers was technical-professional training above lower secondary level, which underwent several transformations during this time (Ornelas, 2009).

71 At the beginning, the UPN did not train teachers but did specialize in education support areas, as well as offering Master’s degrees and Doctorates to help the teachers’ higher education. A year after its foundation, the Degree in Preschool and Primary Education was transferred to the UPN and used to be offered by the Dirección General de Educación Normal y Mejoramiento Profesional. To date, the UPN continues offering Basic Education training for teachers (SEP-DGESPE, 2010). For more information about UPN, please visit http://www.upn.mx/

72 For more information about university degree study plans and programmes for initial teacher training, please visit http://www.dgespe.sep.gob.mx/planes.

73 The criteria are: a) Reduce normal school enrolment with an excessive number of registered students and diversity enrolment by incorporating educational programmes relevant to the state’s needs; b) Strengthen studies of state planning of educational services; c) Authorize enrolment only to normal schools with academic and management response capacity; d) Issue only one enrolment notice in public, private and rural normal schools; e) Use assessment instruments prepared by agencies outside the SEP; and f) Simultaneously apply the entrance examination and establishment of an 8 grade point average in the upper secondary school diploma (SEP-SES, 2010).
that cover this demand have proliferated (AEM06). In the 2008-2009 school term there were 131,763 students aspiring to become teachers – 71% women – in 487 normal schools throughout the country of which 66% received state funding, 5% federal funding and 29% were privately funded.

In public schools, there are five types of teaching position designations\(^{34}\): initial, interim, provisional, permanent and salaried employees, and three possible functions: classroom teacher, pedagogical technical advisor (ATP), and managing staff or principal, which is a hierarchical function. Most Mexican teachers and supporting staff in primary and normal education, more than one million, are SNTE members. Nonetheless, some state and independent unions are part of the Confederation of Independent Organized Unions such as in Veracruz, Baja California, State of Mexico, Yucatan, Puebla and Tabasco. It is important to mention that when a teacher obtains a teaching position, he or she automatically becomes part of the union in its different expressions.

There are different teaching profiles and trajectories at the SEN because of the diverse initial training of basic education teachers. In primary education, normal-school graduates are those that obtained their degree before 1984, and university graduates with a bachelor's degree in primary education the teachers that obtained their degree after 1984. The aim is for teachers to supervise the same group of students throughout a school term, in all subjects, and in some cases, assisted by other teachers specializing in physical education and arts education. However, teacher rotation is very high especially in more marginalized places and even though no statistics exists in this regard, it is known that there can be up to three teachers per student group in one school term (SEP-DGEP, 2010). The people responsible for teaching community courses at CONAFE are community instructors aged 14-27, with at least lower secondary education completed, and for one or two years provide social educational services in small rural or indigenous communities and migrant agricultural camps. In exchange for their services, the instructors receive a living expenses grant to continue their education (CONAFE, 2010).

In lower secondary education, in terms of general and technical services, normal school graduates or university graduates with a bachelor's degree in lower secondary education teach only the subjects associated with their specialty or subjects in which they are deemed to have professional skills and they teach different groups and grades. In addition, university graduates with different specialization areas are hired. When telesecundaria (distance learning, lower secondary education) began in 1968, rural primary education teachers were Normal graduates with some training and their function was that of transmitters of knowledge. Currently, all teachers have a university degree, are facilitators of knowledge and teach all subjects to one group. Lastly, regarding lower secondary schools for workers, general lower secondary teachers generally provide this service at night. In this manner, the SEN comprises a great diversity of professional profiles.

At present, 1156506 teachers, 19% of which teach at pre-primary level, 49% primary level, serve basic education in Mexico and 32% lower secondary level. At basic level, most teachers provide general service (91.5%), 6.3% indigenous, and 2.2% community courses. In lower secondary schools, slightly over half of teachers provide general service (56.7%), 24.7% technical, 17.4% distance learning, lower secondary education and 1.2% lower secondary education for workers. Of these teachers, 84% in primary and 78% in lower secondary education work in public schools; as for private schools, 9% in primary and 14% in lower secondary schools (see Annex J). In the 2009-2010 school term, 34 930 teachers taught physical education and 5 616 teachers taught art education.

As for their academic training, approximately half of the teachers active in the 2008-2009 school term had a university degree (49% primary and 48% in lower secondary), and nearly one-third of primary and lower secondary level teachers were normal school graduates (31.4% and 32.2%, respectively). The others had normal school degrees in pre-primary, upper secondary levels or university postgraduate studies (SEP, 2009*) (see Annex J). Teacher training support programmes emerged in 1995, such as the National Programme for the Continuous Training of Basic Education In-service Teachers [PRONAP] and Programme for the Academic Transformation and Strengthening of Normal Schools [PTF], a year later.

\(^{34}\) The initial appointment is issued in favour of a worker to occupy a newly created initial base post or that has been vacated permanently as defined by Law. The interim appointment is issued in favour of a worker to occupy a base post temporarily vacant for a period not exceeding 6 months. A provisional appointment is given to personnel covering a base post temporarily vacant for more than 6 months. Permanent appointments are issued for the workers after 6 months of service in an initial post, who does not have unfavourable notes in their file or because of hierarchical ruling. Salaried job appointments are given to personnel referred to in Article 5 of the Federal Law for State Workers (DOF, 28 December 1963).
In 2004, the National Policy for the Professional Training and Development of Primary Education Teachers came to be and it provides PRONAP and PTF with continuity and consolidation. In 2008, PRONAP was reorganised into the Programme of the National System of Continuous Training and Professional Betterment of Basic Education In-service Teachers [PSNFCM] with the aim of moving from a programme for teacher refresher courses to a policy for the continuous training and professional betterment of Primary Education teachers and principals. PSNFCM oversees the preparation of academic programs offered to teachers for their professionalization and determines performance profiles for principals, the teachers in front of groups, and ATP, which must be developed using continuous education and professional betterment as the basis (SEP-DGFCSM, 2009).

2. ASSESSMENT PRACTICES OF TEACHING STAFF IN MEXICO

Teacher assessment in Mexico has been a constant component in the SEN to regulate teacher incorporation to the system. In 1947, the Vertical Promotion System [EV] emerged, whose aim was the work and salary-based promotion of teachers in service using a pyramidal structure and implicit assessment system. New regulations, still in force, were established for this system in 1973.

In 1984, the SEP began applying nationally, through the then Directorate General of Accreditation, Incorporation Certification, and Revalidation, a selection examination to aspirants for enrolment in federally funded Normal Education Entrance Exam (EIEN). Prior to it, there existed a graduation profile and a competitive examination to enrol in normal schools and some institutions applied a knowledge examination.

Enrolment demand decreased considerably in 1987, so in many instances the examination ceased to be useful as a selection instrument. Because of this, the decision was made to reorient its purpose and organise a diagnosis instrument to obtain an overview of normal education student knowledge. In 1989, the test was Diagnosis and Classification Instrument for Normal School Enrolment (IDCIEN) and made available to the states. The IDCIEN has undergone three stages in terms of coverage. From 1992 through 1995, each state was responsible for applying it. From 1996 to date, nearly all states have used it, which has led to this examination’s repositioning phenomenon promoted by state education authorities requesting the training diagnosis of future teachers from an outside agency. In 1998, the test’s theoretical-methodological framework and structure were reformulated and from that moment on, CENEVAL, a nongovernmental agency, prepares the examination at the request of the states (Banegas and Blanco, 2005; SEP-DGE, 2002; SEP-DGEP, 2010).

For more information about these programmes, please visit http://www.oecd.org/dataoecd/52/62/32023694.pdf.

The main tasks of principals are guiding the schools' pedagogical transformations, analyse progress of expected student learning and support the continuous training of the faculty. The target competencies to develop in principals are: Knowledge of the educational system, its history and regulatory framework; Incorporate the participation of the school collective and parents into the institutional management; Analyse different school management approaches; Promote democratic management and the creation of a respectful, tolerant, inclusive, equitable, law-abiding, diversity-embracing environment; Master curricular knowledge, theme content and commit to the academic leadership of the school community, fostering an school environment suitable to learning and teacher training; Apply communicational skills to foster dialog in conflict resolution and seek agreements in school project implementation; Knowledge and use of information and communication technologies in the didactic context as an integral aspect of educational processes and institutional management; Use methodological assessment proposals in the decision-making process; Approach institutional and school development adhering to national and international standardized testing results; Fluency in a second (national or foreign) language (SEP-DGFCSM, 2009).

The target competencies to be developed in teachers in the classroom are: Mastery of teaching curricula and components for the development of intellectual skills and complex thought in students; Mastery of the referents, functions and structure of their own language, and particulars of each subject; Identify their learning processes and procedures transferable to other fields and areas that can be used to further their students’ learning process; Promote innovation and use of different didactic resources in classroom to foster learning environments and encourage student curiosity and zest for knowledge; Contribute to forming democratic citizenship by taking into the classroom means of interaction and reflection in keeping with the principles and values of democracy; Properly cover cultural and linguistic diversity, learning styles and starting points in students, as well as mentoring relationship that value individuality and potentiate meaningful learning; Work collaboratively and build academic networks for education development and research; On-going reflection on their teaching practice both individually and collectively and create shared learning spaces; Incorporate information and communication technologies in professional training processes and into the teaching and learning processes of students; Organise their own continuous education by becoming involved in personal development processes and professional self and collective faculty training on a permanent basis and linking it to the daily challenges offered by their educational practice; Master a second (national or foreign) language (SEP-DGFCSM, 2009).

The target competencies to be developed in ATP are: Mastery of the principles and philosophical basis of Mexican education as well as other federal and state educational policy guidelines; Understanding of problems and policies of basic education toward a strategic vision of the educational context; In-depth knowledge of study plans and programs, teaching approaches and supporting material in basic education; Mastery of teaching curriculum and components for the development of intellectual skills and complex thought in students; Collaboration in teaching training processes through advice and company to the schools, assisting in the challenges teachers encounter in their daily educational practice; Development of academic guidance processes and educational improvement in the different school environments; Work collaboratively with other educational professionals from whom they learn and share experiences; Engagement using mentoring relationships with faculty and students to improve educational achievement; Use of information and communication technologies with didactic purposes; Design and development of educational assessment and intervention mechanisms; Preparation of institutional diagnostics and school intervention programmes collegially; Mastery of a second (national or foreign) language (SEP-DGFCSM, 2009).

For more information about this Programme please visit http://formacioncontinua.sep.gob.mx/index.php?option=com_content&view=article&id=51&Itemid=76
Since 1992, teacher assessment has played a strategic role in the SEN, as the ANMEE emphasizes the importance of teachers, the importance of their initial and professional training and their relationship with students; therefore, strengthening their skills is essential (SEP, 1992; SEP-DGEP, 2010).

The PNCM was announced and launched in 1993 as a policy line of this Agreement. The aim of this Programme is to promote the professionalization of faculty, principals and pedagogical-technical advisors through salary improvement in order to keep good teachers in classrooms. This programme goes hand in hand with an assessment system that has changed over time. At present, it contemplates six factors, three of which are assessed through tests: National Continuous Training Exams for In-service Teachers [ENAMS] used for the professional preparation factor and since 2006, the results of the ENLACE test for assessing the school achievement factor. Teachers can be registered in both EN and PNCM. The PNCM was the first systematic assessment of teachers in Mexico.

In 1997, the DGFCMS co-ordinated and applied ENAMS for the first time as a test with a formative purpose and on a voluntary basis that makes it possible to detect in-service teachers’ areas of opportunity for implementing actions geared toward improving their skills and reinforcing mastery of content of higher difficulty.

Since 2004, CENEVAL prepares and applies the examinations used in normal schools for diagnostic purposes, such as General and Intermediate Knowledge Testing in semesters four and eight. General tests were first developed and applied in 2004, and Intermediate tests were developed and applied in 2010 (SEP-DGESPE, 2010).

Agreement number 261 was issued for assessing the initial training of basic education teachers and it establishes that the strategies, forms and instruments used by normal-school teachers for student evaluation must allow them proper assessment of knowledge, skills, attitudes and values set forth in the study Plan and Programmes for the training of basic education teachers. In this sense and at the beginning of the course, teachers must explain clearly the criteria, strategies and instruments used to evaluate the students’ personal progress and procedure for grade assignment. Grading must be consistent with the learning evaluation performed by the teacher, the official grading scale will be numerical and whole numbers from 5 through 10 will be assigned, partial grades will be a minimum of two and will be assigned in accordance with progress in the treatment of each subject’s content and achievement of educational objectives of the corresponding programme, the student will pass a subject when she or he obtains a minimum average of 6 as the final grade, and the final grade from each subject will be the average obtained from partial grades (DOF, 8 September 1999).

For graduating, at the request of the UPN and some normal schools, the CENEVAL prepares and applies General Examinations for Bachelor's Degree Graduation [EGEL]. Failing that, normal schools apply other graduating instrument. It is important to mention that each institution establishes different policies for granting degrees. In general, it is necessary to successfully complete all subjects in the corresponding study plan, fulfil the community service requirement, and develop a dissertation/essay to support dissertation examination. In addition, there are other options as indicated in Secretariat Agreement number 286 (DOF, 30 October 2000).

80 Before Enlace, a test with a matrix structure was applied and group-level results were obtained. In the case of primary schools, the test from each school grade was assessed on five forms and each student answered 20% of the test. In lower secondary schools, there were three forms per subject and each student answered 33% of the test. In the end, the group result was obtained.

81 Assessment of students of SEN institutions offering bachelor’s degrees for the training of basic education teachers will be performed observing the following criteria: a) Assessment is a fundamental component of the educational process. Assessment strategies and activities put in practice by teachers must be consistent with the graduating profile sought through teacher training, academic focus of study plans and teaching focuses and specific objectives of each subject or course programme. b) Assessment must meet an eminently educational function. The evaluation process must allow teachers, at all times, the use of meaningful information about the students’ academic development to identify the success or difficulties of teaching and learning as well as what originates them and to design educational activity enhancement strategies. c) Assessment must be systematic, continuous and integral. Systematic, because it must respond to an established plan in teaching programmes according to the moments chosen for its realisation; continuous, because it is part of the educational process itself, taking place during the school year; and integral, because it must consider the different aspects of student development, especially those that correspond to their teacher training. d) With the aim of providing feedback to teaching and learning processes, the teacher and the students must analyse the evaluation results of educational activities carried out in their group as well as the assessment of academic achievement of each of them. e) Students must be evaluated in the context of learning activities performed both in the classroom and in the development of teaching practices. Teachers must design and apply different evaluation strategies for improving the diagnosis of the teaching process, retain student interest and acknowledge their achievements and academic experiences, contributing to their development of critical thinking and formulation of their own judgments. f) Assessment strategies, forms and instruments used to evaluate student learning must foster recognition and attainment of a wide array of knowledge, skills, attitudes and values set forth in the corresponding study plan. g) In order to improve attention and help to students, assessments implemented must be part of a work programme of the institution. Planning of teaching and evaluating tasks for maximum utilization of the information obtained during the process and ensuring attainment of educational objectives are responsibility of teachers and managing staff of the schools offering basic education teacher training (DOF, 8 September 1999).

82 SEP issues Academic Guidelines for Organising the Graduation Process for Bachelor's Degrees in Pre-primary, Primary and Lower Secondary Education whose study plans were reformed. Through these guidelines, the SEP establishes responsibilities, organisation and actions to be developed so that students who
The National Competition for the Granting of Teaching Positions took place for the first time in 2008, which used performance as the axis for hiring and promoting, thus standardising the entrance process to teaching service nationwide. Previously, there were different entrance mechanisms and requirements in place in some states; in others, all graduates had direct access to a teaching job. This national competition consists in the application of the National Exam of Teaching Knowledge and Skills (ENCHD).

In summary, the main assessment practices in force for teachers in Mexico are established in terms of initial training processes and of entrance to the SEN Service, time at which they are considered as teachers in service, trainees in service, and for promotion. During initial training, aspirants are chosen for enrolment in normal schools through the IDCIEN; their training undergoes diagnostics halfway through and at the end of the bachelor’s degree via General and Intermediate Knowledge Examinations for Normal Schools and upon graduation, the EGEI is applied in several normal schools. To enter active service, aspirants are chosen through the ENCHD; once in service and on a voluntary basis, teachers can take the ENAMS and participate in assessments connected to the salary- and work-based promotions for teachers in service, such as the PNCM and/or the EV system. There are other specific efforts for teacher assessment at state level as well.

Participation in these assessments is voluntary and with predominantly high-impact summative purposes, except the IDCIEN, General and Intermediate Knowledge Examinations and the ENAMS. The key masteries or performances in which teachers are assessed through these tests are: knowledge of content, and general and specific skills (UNESCO-OREALC, 2006). The information-gathering methods used are: school performance indicators, knowledge and teaching skills tests and application of questionnaires to principals, teaching peers, parents or students (OECD, 2005; SEP-DGEP, 2010). The different agencies responsible for the assessments distribute information brochures, study guides and syllabus to degree candidates.

In terms of assessment responsibilities, the SEP is in charge of implementing and supervising this process because these are evaluations made by agencies not linked to the schools. The DGEP coordinates two teacher assessments: evaluation of the professional preparation factor of the PNCM and ENCHD. The DGFCMS coordinates the ENAMS (SEP-DGEP, 2010; SEP-DGFCMS, 2010). The CENEVAL, as an outside agency to the SEP, prepares, using a specific methodology, the IDCIEN, ENAMS, ENCHD, General and Intermediate Knowledge Examinations and the EGEI and also applies the last two. Local authorities take part only in the implementation of teachers’ assessment processes. The AEE and schools collaborate in process of information application and gathering from assessments of the PNCM professional preparation factor. There is no evidence of teacher assessments at school level.

Next, a description of the tests used for initial training, entrance to SEN service, training while in service and those used for promotions and incentives.

A) INITIAL TRAINING

DIAGNOSIS AND CLASSIFICATION INSTRUMENT FOR NORMAL SCHOOL ENROLMENT [IDCIEN]

The purpose of the IDCIEN is to select aspirants to normal school education. CENEVAL prepares this examination and DGEP oversees its application at the request of each state. At present, nine states are advised (SEP-DGESPE, 2010). This is a regulatory examination and tests three sets of skills: verbal, mathematics and formal reasoning. Degree candidates receive an informative guide about test structure and characteristics of the application process. The grade is obtained from the percentage of correct answers to all test components, which makes it possible to place the degree candidates at four skill-development levels: A (0-30% correct answers), B (31-50% correct

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44 Secretariat Agreement number 286 establishes guidelines for norms and general criteria that must be met for the revalidation of studies abroad and study equivalency, as well as procedures for accrediting knowledge at educational levels, degrees acquired through self-education, through work experience or based on the certification regime referring to work training (DOF, 30 October 2000).

45 There is an enrolment period due to the voluntary nature of these assessments; there is a database with information from all teachers enrolled, which is used to calculate the material necessary and to personalise the answer sheets with each teacher's personal information.

46 The methodology consists of eight stages: design, construction, verification, assembly, application, grading, reporting and maintaining of the measuring instrument. The participation of CENEVAL consists in guiding and providing methodological and psychometric tools for test development. At this stage, academic groups formed by normal-school teachers and experts in teacher training from different educational levels and services have an active participation (CENEVAL, 2010). For more information about this methodology, please visit http://www.ceneval.edu.mx/
In 2005, the DGEP applied 21 tests to a total of 37,135 aspirants from Aguascalientes, Chihuahua, Morelos, State of Mexico, Chiapas, Colima, Guerrero, Hidalgo, Nuevo Leon, Coahuila, Michoacan, Jalisco, Quintana Roo, San Luis Potosi, Tabasco, Tamaulipas, Tlaxcala, Durango, Baja California Sur, Baja California and Oaxaca. In 2006, 27 different tests were applied to more than 58,000 aspirants, adding to the previous list the Federal District and Veracruz. There were similar figures in 2007, 2008 and 2009 for the same institutions. Results from this examination make it possible to 1) generate a personalised diagnostic of accepted aspirants for feedback purposes; 2) generate global indicators that can serve as inputs for the implementation of educational activities on campus or the state as a whole; 3) gather elements to feed the analysis and assessment of the upper middle level at state and local levels; and 4) have elements for following up teacher training. In addition, monitor students during their initial training in order to give feedback to schools providing teacher training and the students themselves; however, this practice has not been consolidated (Banegas and Blanco, 2005; SEP-DGE, 2002; SEP-DGEP, 2010).

GENERAL AND INTERMEDIATE KNOWLEDGE EXAMINATIONS

General and Intermediate Knowledge Examinations are the purview of the DGESPE and are prepared by the CENEVAL. These tests diagnose the knowledge and skills of Normal School students in relation to the entrance profile of the different degrees offered. Intermediate examinations are applied at the end of semester four and General Examinations at completion of semester eight. These are specialised, diagnostic and low-impact tests. The five training fields of the graduation profile for the different degrees offered by normal schools are the reference standards for preparing these examinations: Intellectual abilities; content, teaching objectives and approaches; didactic skills; perception and response in the school environment; and professional identity. The tests are for pre-primary, primary, physical education and ten tests for lower secondary associated with subject fields. However, there is no evident differentiation among these examinations except some specific content in some subareas. Because they are low impact, some states, schools or degree candidates have the option of not taking them.

Personnel not connected to the CENEVAL apply these tests. The levels of performance at which teachers are placed based on results are: “insufficient”, “sufficient” and “outstanding”. Normal schools review the results of these evaluations and make adjustments for them, though this process is neither documented nor systematised (CENEVAL, 2010).

GENERAL EXAMINATIONS FOR BACHELOR’S DEGREE GRADUATION [EGEL]

Students wishing to graduate take the EGEL, prepared by CENEVAL at the request of the UPN or Normal Schools. The objective is to identify the achievement level attained by graduates in relation to the knowledge and general skills required by the graduation profile for degrees offered, for instance, Pre-primary Education and Primary Education for the indigenous community. These tests consist of 170 to 200 multiple-choice test elements, one for each degree offered: Pre-primary, Primary, Physical Education and Lower Secondary Education. For the latter, the tests have a common area for all specialties and one specific area with content referring to each specialty (CENEVAL, 2010).

Academic bodies formed by teachers of the different units of the UPN or Normal Schools have an active participation during the creation of the instrument. As part of the preparation, CENEVAL writes study guides for each EGEL, which includes what each test assesses, their structure and application process characteristics.

Personnel not associated with the CENEVAL apply the tests. Tests results are reported on three performance levels established by the test’s Technical Committee based on quality standards validated by independent expert groups.

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86 These numbers only consider tests applied by DGEP to aspirants to the seven degrees offered by training institutions in special education, physics, initial, pre-primary, indigenous pre-primary, primary, indigenous primary, lower secondary and telesecundaria education (SEP-DGEP, 2010).

87 For more information about study guides for the EGEL please visit http://guiaegel.com
Report of Basic Education Assessment Practices in Mexico, 2010

for each of the academic and professional skills involved in the test’s reference profile. These levels are: “insufficient”, “sufficient”, and “high performance”. The institutions that use this examination define different policies for its use. In some cases, teachers obtaining “sufficient” or “high performance” levels also obtain their professional degree. However, each institution defines different use policies for the results (CENEVAL, 2010).

B) ENTRANCE TO THE SEN SERVICE

NATIONAL EXAM OF TEACHING KNOWLEDGE AND SKILLS [ENCHD]

Basic education teachers voluntarily participate in the National Competition for the Granting of Teaching Positions. This competition began in 2008, with the aim of placing performance as the axis for hiring and promoting, thus standardising the entrance process of teachers applying for state-level service at the SEN as well as those applying for full-time positions, second teaching jobs or aspire to a greater number of hours-week-month. A notice is published nationally, but there is a state-technical annex describing the conditions at state level (SEP-DGEP, 2010).

This national competition consists in the application of the ENCHD. It is a standardized exam and includes 80 multiple choice questions. In 2010, 23 types of exam were prepared according to the professor’s profile: by the level of education, service and subject, taking into consideration indigenous education, special education and televised lower secondary distance education.

The test’s reference profile is the official graduation profile from teacher training schools as well as the content of study plans in force (Roseveare, 2009; SEP, 2002b, 2010). In this sense, it assesses four areas or proficiencies of curricular content: 1) specific intellectual abilities; 2) mastery of curricular content; 3) didactic skills as well as objectives and didactic suggestions contained in official programmes; and 4) teaching regulations and teaching ethics. The test has three sections: a) common training, which includes regulations and school management; b) general training, which includes objectives and content of primary education and intellectual abilities; and c) specific training, comprised by mastery of content and didactic skills.

The CENEVAL is in charge of preparing this examination. Three academic committees are assembled for this purpose: one to design the reference profile, one to prepare the test and one to validate the test components; the members are 566 specialists and classroom teachers who have been acknowledged by the magisterial guild for their academic performance and are part of different AEE. An Independent Federalist Evaluation Unit [OEIF] was formed in 2009, with 72 assessment and teaching experts assigned by each state, SEP and the SNTE, who determine the instruments’ technical validity, grading method, study guides and characteristics of complementary evaluations applied in some cases, which are defined by state education authorities, such as bilingualism for indigenous education, psychological tests, interviews, among others.

The OEIF establishes the grading criteria and aspirants are placed on three performance levels: “eligible”, “subject to academic equalization” and “unacceptable”. Aspirants with 30% or fewer correct test components are placed in the “unacceptable” list. The cut-off point between the other two levels is defined using the Hofstee dual Method, which considers the number of aspirants and job vacancies in each state as inputs (SEP-DGEP, 2010).

DGEP is in charge of result application, analysis and publication. Results are published on the SEP Website and printed media in each state. These results are shown on three lists, one for each category, with a file number and score obtained by degree candidates. Active teachers are placed only under “academic equalization” and recent graduates placed under “eligible” are assigned a permanent post, and those placed under “academic equalization” are assigned an interim position on the condition they must pass the accreditation course and show satisfactory performance during the school term in order to make the post permanent. The performance is assessed differently in every state; for instance, through observations of the classroom work and the feasibility of carrying out an assessment through the portfolio is under consideration. Recent graduates who are not accepted are not hired. At federal level, the DGEP delivers the results to the DGESPE and Education Authorities of each state.

9 Types of exams include: pre-school, indigenous pre-school, primary indigenous primary, special education-teacher, speical education-psychologist, televised secondary distance education, Spanish, Mathematics, Biology, Physics, Chemistry, Geography, History, English, Civics and Ethics, Arts, Dance, Theatre, Music, Music Education and Technological Education (CENEVAL, 2010).

90 Study guides and list of topics are available in this Website http://www.concursoanacional.sep.gob.mx

91 The results are published here http://www.alianzaconcursonacional.sep.gob.mx
C) IN-SERVICE TRAINING

NATIONAL CONTINUOUS TRAINING EXAMS FOR IN-SERVICE TEACHERS [ENAMS]

The objective of ENAMS is the detection of teachers’ areas of opportunities to implement actions that improve their skills and reinforce mastery of more difficult content. In-service teachers register voluntarily and it is available to classroom teachers, management staff, supervisory staff, heads of teaching and ATP of all levels and services of primary education.

After 13 ENAMS applications, the number of accumulated registrations adds up to 4 235 021 teachers who have applied to take these examinations. In addition, the number of teachers who have registered has increased year after year: in the 1997-1998 school term there was a total of 135 mil teachers registered, and in the 2009-2010, 545 thousand teachers (SEP-DGFCMS, 2010); at present, the database shows 997 720 registrations from public school teachers who have signed up to take these examinations at least once.

The assessment process includes the participation of several internal SEP key experts as well as external. The DGFCMS coordinates the process and publishes the notification; the CENEVAL has prepared the tests since 200891; state education authorities are in charge of its application, and the DGFCMS performs the analysis, establishes selection criteria, approves teachers and publishes the results. The definition, design, preparation and evaluation of the tests are carried out by a Technical Committee and supporting Academic Bodies (SEP-DGFCMS, 2010). The methodological demands, technical quality of assessment instruments, transparency in the preparation and application processes as well as the analysis of results meet relevant quality and security standards for their application (SEP-DGFCMS, 2010; AEM09).

Every year, these examinations constitute approximately 15 standardised multiple-choice tests and the number of tests varies depending upon national educational priorities. The areas or mastery of teaching performance measured are: 1) those related to primary education: approach by competencies and comprehensive reform of primary education, and 2) disciplinary skills by thematic area of the test.

The test’s thematic areas are associated with the educational level, service, subject and position in which the teacher works. Thus, teachers bring into play their knowledge to solve issues that could arise in the classroom or school as well as their knowledge of education material used on their daily practice, understanding of current teaching or school management approaches and mastery of content taught or required to run a school. These examinations are not meant to measure the teachers’ retaining capacity (SEP-DGFCMS, 2010).

The DGFCMS prepares a number of information brochures about each of these examinations’ modalities so that teachers can familiarize themselves with the test they will take92.

Teachers know their test scores as performance feedback and said score can be associated with a certain number of points in the PNCM. At each ENAMS evaluation process, test takers have access to a number of diagnostic booklets93 called “Booklets for personalised diagnostic: Elements for detecting continuous training needs”, which contain information about the topics and content they must reinforce based on the mastery level demonstrated during their assessment. This guarantees teacher feedback that would strengthen the decision-making process in terms of their continuous training and professional betterment needs.

In addition, results from these tests contribute significantly to the definition of continuous education policies based on national educational priorities and the need for the professionalization of in-service teachers. In this sense, the DGFCMS performs, with the help of experts, global quantitative and qualitative analyses of the test results with the purpose of using them for defining new options of continuous training and professional betterment as reflected in

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91 In addition to CENEVAL, there have been other agencies in charge of preparing the ENAMS, such as UPN, and the one whose responsibility will be is discussed every year (SEP-DGFCMS, 2010).
92 For more information about this material please visit http://dgfcms.sep.gob.mx:7037/PrioryRefEdB/Materiales/FollInf0910/follInf0910.htm
93 For in-depth knowledge of these booklets please visit http://formacioncontinua.sep.gob.mx/index.php?option=com_content&view=article&id=59&Itemid=112
the National Catalogue of Continuous Training and Professional Betterment of Basic Education In-service Teachers\(^\text{94}\). In addition, these confidential analyses are delivered to the states (SEP-DGFCMS, 2010).

**D) PROMOTIONS AND STIMULI**

**VERTICAL PROMOTION SYSTEM [EV]**

The EV is a point-based competition system organized in each state according to bases set forth in the Federal Law for State Workers for the promotion of workers (Article 47, DOF, 28 December 1963). Based on the Promotion Rules for SEP Workers, six months after the assignation of an initial job position, the worker is subject to hierarchical right (DOF, 14 December 1973). The National Mixed Promotions Commission and State Commissions oversee compliance with these norms.

There is an EV system in place for state workers in each state (UNESCO-OREALC, 2006). Promotions are regulated through a competition among several candidates and the process is based on merits in terms of four factors: a) knowledge (45%); b) aptitude (25%); c) years of service (20%), and d) discipline and punctuality (10%) (Article 50, DOF, 28 December 1963).

This promotion system is accompanied by an assessment proposal based on an instrument called “Promotion scale sheet” for advancement based on educational level with a value of 720 points. There is a voluntary promotion scale file to advance in school structure positions. Teachers, principals, assistant principals and heads of sectors at basic level and teachers, principals, assistant principals, heads of teaching, supervisor, head of sector in lower secondary education. Only the abovementioned positions are considered for EV. The persons in charge of filling the Promotion scale sheet are the school’s principal an assistant principal. The scale sheet loses value if, for any reason, the score obtained is below the maximum score (SEP-DGEP, 2010).

**NATIONAL TEACHING CAREER PROGRAMME [PNCM]**

The National Teaching Career Programme (PNCM) is a horizontal promotion stimulus system in which basic education teaching staff, including principals and pedagogical-technical advisors participate voluntarily and individually and have the possibility of being hired or promoted if they meet all requirements and their assessments meet regulatory guidelines. The objective is to help elevate the quality of national education through recognition and fostering of the career’s professionalization – refresher courses, training and betterment – as well as accreditation of academic enhancement courses and distribute incentives among basic education teachers that have permanent or provisional appointments. The programme began in 1993, with the participation of 384 697 teachers and by 2009, there were 774 115 teachers benefitted from the Programme (see Annex K).

The Programme has five stimuli levels: A, B, C, D, and E, A being the first level. In order to access the next level, teachers must complete, in addition to established requirements, the stipulated time at the previous level – from two to four years depending on whether the area was urban, rural or low development. Every year, the number of jobs for new hires or promotions at each level, service and state are determined based on financial ceilings and guidelines of the career itself.

Salary increases range from 25% at the initial level (A), up to 200% in the last level (E) (Nieto, 2009; UNESCO-OREALC, 2006). Each position has a base salary and the post must be permanent in order to enter the Programme\(^\text{95}\). In 1993, there were teachers only at levels A —360 861—, B —23 362— and, C —474 teachers – and, it was in 1998, when teachers occupied the other levels (see Annex K). In less than 10 years, teachers’ salaries were multiplied several times and from its first year, the Programme delivered upon the commitment with the SNTE that salaries would be four times the minimum general salary at level A (AEP07).

To reach each level, three teacher types or branches are considered according to their function. The first branch includes teachers who teach in a classroom\(^\text{96}\); the second includes school principals\(^\text{97}\) and hierarchical scale

\(^{94}\) To see the content of the National Catalogue of Continuous Training and Professional Betterment of Basic Education In-service Teachers 2009-2010, please visit http://formacion continua.sep.gob.mx/sites/CatalogoNacional/CatalogoNacional2009-2010.pdf

\(^{95}\) However, there are many teachers without a proper appointment because they are hired on an hourly basis and 19 and 21 hours are required for permanent appointment; they are sent to schools with incomplete organisation.

\(^{96}\) The first branch includes the following profiles: pre-primary education teachers or CENDI educator, teacher of indigenous pre-primary education, primary education teacher (first, second and third cycle and art teacher), teacher of indigenous primary education (first, second, third cycle), lower secondary education
positions, and the third includes the ATP. Each branch is assessed using different tests according to level, educational service and school grade. Promotion times vary based on the branch and type of school where they work. Teachers applying for a job or a promotion must submit to assessments on the factors inherent to their branch, obtain the highest scores on global evaluations and meet all other regulatory requirements in force (Banegas and Blanco, 2005; INEE, 2006; Nieto, 2009; SEP-DGEI, 2010; SEP-DGEP, 2010; UNESCO-OREALC, 2006).

In 2009, the PNCM had 677 850 teaching positions registered in the assessment process and an accumulated number of 774 115 distributed by level as follows: 54.5% at level A, 26.5% at level B, 11.8% at level C, 4.8% at level D, and 2.4% at level E (see Annex K). From the start, teachers that are part of the Programme must pass a professional preparation test and the student achievement factor was first assessed in 1995. The first reform of PNCM guidelines took place in 1998, though it has undergone adjustments throughout its history. The six assessment factors include examinations of teachers’ knowledge and skills, student achievement, peer evaluations, and teacher professional profile. The professional preparation factor is the most important and it, along with student achievement, contributes nearly 50% toward the final assessment of each teacher. The factors are described below:

1. Seniority in the educational system. Years of teaching service performed in basic education. This factor has a value of up to 10 points.

2. Academic level. Last accredited education level at the time they start the assessment stage. This factor has a value of up to 15 points.

3. Professional preparation. Assessment of knowledge required of teachers to develop their function, called “Professional preparation”. This factor has a value of 5 points minimum and 28 maximum and it is measured through an examination.

   The “professional preparation factor assessment” consists of 82 different types of tests for teachers and managing staff based on the branch corresponding to their profile. It is a multiple-choice standardised test" test offered annually to approximately 650 000 teachers. The mastery of teaching areas or performance measured are: knowledge of study Plans and Programmes, mastery of programme content, regulations, educational legislation and school management, as well as objectives and didactic suggestions contained in official programmes. In this sense, the assessment includes knowledge and skills required by teachers to carry out their function in terms of teaching content (what they teach), knowledge of the curricular material (disciplinary knowledge) and in-classroom approach to the educational process according to the current curriculum (how they teach).

   The DGEP in coordination with education authorities of each state prepare and apply these tests. This institution has a national test component bank that feeds each test version, which is constantly enriched by contributions made by teachers in workshops offered by each state to prepare test components. The DGEP distributes a list of topics to each examinee.

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teacher (Spanish, English, French, Mathematics, Physics, Chemistry, Biology, Geography, History, Civics and Ethics, Visual Arts, Music, Dance and Theatre), teacher of technological lower secondary education, distance lower secondary (1st, 2nd and 3rd), teacher of basic education for adults (primary, lower secondary-Spanish, lower secondary-social sciences and lower secondary-sciences), physical education teacher (pre-primary, primary and lower secondary), and psychologist, specialists and guidance teacher (pre-primary and primary) (SEP-CNCM, 2010). The second branch includes the following profiles: principal and CENDI inspector, principal, inspector and head of sector or area (pre-primary, indigenous pre-primary, primary, indigenous primary and lower secondary), principal, assistant principal, head of lower education (Spanish, English, French, Mathematics, Physics, Chemistry, Biology, Geography, History, Civics and Ethics, Visual Arts, Music, Dance and Theatre), head of technological lower secondary education, lower secondary education inspector general, teacher of distance lower secondary education, area inspector, head of sector, teacher of distance lower secondary, CAM principal and supervisor of special education, principal of special education USEP primary principal and inspector of basic education for adults, head and inspector of cultural missions, headmaster and inspector secretary of primary boarding school, principal or supervisor of special education, federal director of physical education and normal-school graduate inspector of physical education (SEP-CNCM, 2010). The third branch includes the following profiles: special education, pre-primary and CAPEP, initial education, pre-primary education, indigenous pre-primary education, primary education, indigenous primary education, general and technical lower secondary education, pedagogical-technical advisor in physical education, distance lower secondary education, extramural education, primary school arts education, pedagogical-technical advisor in visual arts, and special primary education (SEP-CNCM, 2010). To see the top scores for each branch please read the report published by OREALC of UNESCO (2006). For indigenous education, the “Profile of teaching skills for indigenous education” was prepared, which constitutes a reference for the formation, professionalization and assessments in indigenous contexts. It is formed by six dimensions: 1) Content proficiency, 2) Pedagogical-didactic competencies, 3) Professional identity and ethical responsibility, 4) Educational attention to cultural, linguistic and ethnic diversity, 5) Personal skills (intellectual and socio-affective), and 6) Perception and response to the environment. This applies both to tests of professional preparation factor as well as that of continuous education and professional betterment factor (SEP-DGEI, 2010).

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100 The list of topics for each test is available at: http://www.dgep.sep.gob.mx:8080/dgep/index.php?option=com_content&task=view &id=55&Itemid=16.
Upon completion of the test, the National Academic Commission SEP-SNTE, composed of experienced specialists and teachers recognized for their performance, review the instrument to generate recommendations and suggestions for improvement. For score assignation, grading groups are created based on test type taken. (SEP-DGEP, 2010)

DGEP conducts the analysis and publication of the results. Individual results are reported according to a standardised index\(^\text{102}\) based on national averages, which prevents comparability of results over time because they are standardised/ regulatory tests. Reports include different types of additions and norms/ regulations.

Teachers are provided with their scores and diagnostic of results as performance feedback. Results are also made available to state education authorities by topic unit assessed, with historic results, as diagnostics and accountability of teachers’ strengths and weaknesses (INEE, 2006\(^b\); SEP-DGEP, 2010).

4. **Continuous Training and Professional Betterment.** This factor considers two elements: 1) accreditation of national and state courses from which a score is obtained, and 2) results from the ENAMS. The use of ENAMS provides up to 12 points. It is important to remember that teachers can take the ENAMS without needing to take part in the PNCM (SEP-DGFCMS, 2010). The DGFCMS coordinates the evaluation of the continuous training and professional betterment factor of the PNCM (SEP-DGFCMS, 2010). This factor has a maximum value of 17 points.

Continuous training and professional betterment are currently part of a state policy that is beyond the PNCM, as the PSNFCM has been recently established and it is offered to all teachers, administrators and ATP in basic education service and not only to those registered in the PNCM (SEP-DGFCMS, 2010).

5. **Professional performance.** Assessment of all daily actions carried out by teachers in the performance of their duties. It is assessed through a handbook filled by peers and administrators. This factor considers aspects such as planning and development of the teaching and learning process, participation in school administration and teacher interaction with school and community. This factor has a value of up to 10 points.

6. The last factor varies in terms of the branch to which the teacher belongs and it has a maximum value of 20 points:

   a. **Student Achievement** (1\(^{st}\) branch). This factor considers student learning and it is assessed through a test applied to students of the teacher under evaluation. To this end and since the 2006-2007 school term, the ENLACE test has been used, whose purpose is to provide a diagnostic of the students’ learning level.

   Descriptive reports are issued based on the results obtained. At lower secondary school level, for the subjects not yet measured by ENLACE, norm-based tests are used, which are the ones that had been applied from the start of the PNCM. For the first primary grades, pre-primary and special education not covered by ENLACE, the teacher is assigned this factor’s maximum value.

   b. **School Performance** (2\(^{nd}\) branch). Assessment of actions carried out by teachers with an administrative position, which affect student achievement and teachers’ professional training. It is evaluated using a handbook prepared by the CNCM.

   c. **Education Enhancement** (3\(^{rd}\) branch). Assessment of actions involving the update, research and preparation of materials, contributing to the enhancement of the teaching-learning process. It is evaluated using a handbook.

\(^{102}\) For example, to obtain an average for primary schools of classroom teachers, the \(i n\) scores are added on an index of correct answers from first-cycle assessments (\(i X\)), plus \(j n\) scores on an index of correct answers from the second cycle (\(j Y\)), plus \(kn\) scores on an index of correct answers from the third cycle (\(k W\)), plus \(ln\) scores on an index of correct answers from one-room and incomplete primary school (\(l V\)) and the result is divided by \(i n+jn+kn+ln\) (SEP-DGEP, 2010). For more information about this index’s calculation visit [http://www.dgep.sep.gob.mx](http://www.dgep.sep.gob.mx)
The SEP is responsible for integrating scores from the six factors currently in force. The DGEP prepares the tests for factors 3 and 6. The DGFCMS coordinates the preparation of the ENAMS, which evaluate factor 4 and the “Assessment Body” defined in the Programme’s general guidelines, whose integration varies by branch, evaluates factor 5, and receives and validates the documentation and data corresponding to factors 1 and 2.

In 2006, the SEP requested an external assessment of the PNCM from the Research and Development Corporation [RAND]. The assessment results showed the following by factor. Student tests (student achievement) in general showed: a) a broad coverage of study Plans and Programmes, b) low degree of internal consistency and reliability of teacher tests, in some cases inferior to those considered acceptable by international standards, and c) they require low-level cognitive skills.

As for the instruments used to assess professional preparation, the findings showed: a) Test coverage focused on curricular content, and formal and legal aspects, b) low-level cognitive skills assessment, and c) questions with the same degree of difficulty for higher promotion levels. Furthermore, the findings indicated a prevalent lack of objectivity in peer assessment of professional performance (CENEVAL, 2010; Nieto, 2009; Santibáñez, 2006). In addition, the report of results delivered to teachers does not make distinctions based on the teacher’s professional profile (SEP-CNCM, 2010). Based on these findings and since 2006, the student achievement factor is assessed using ENLACE and a reform to the PNCM was proposed, which will be discussed in the Policy Initiatives section.

3. VARIATIONS IN RESULT IMPLEMENTATION AND COORDINATION

Results of the “Student achievement” factor from the PNCM are linked to students’ results from the Enlace test. As for the ENAMS, preliminary studies are carried out to link the results with that of ENLACE to put together series that make it possible to infer impacts from teacher professionalization in academic achievement (SEP-DGEP, 2010; SEP-DGFCMS, 2010). The ENLACE test development, however, did not contemplate any of the above.

In sum, a stronger and systematic coordination of results is needed between teacher assessment efforts and the assessment of other SEN components, as well as their participation in continuous education, topics and content taught and on which students are assessed in large-scale tests (SEP-DGFCMS, 2010).

With regard to implementation variations, the instruments currently used to assess teachers do not differ depending upon teacher experience level but they do in terms of educational level, service, and subject and their position or function (SEP-DGEP, 2010).

4. PUBLICATION AND USE OF RESULTS

The publication of teacher assessment results in Mexico consists in delivering them to aspirants and participating educators. The most systematic and solid examples are discussed in detail below.

Since 1994, the DGEP annually distributes state PNCM reports of results of the professional preparation factor and the student achievement factor since 1997. Separate reports are prepared for each factor detailing the analysis procedure used and results are disaggregated. These reports are distributed to national education authorities and technical areas as well as to state education authorities. Concerning the professional preparation factor, the results are shown by type of test and diagnostic unit, and are expected to be used in the design of teacher on-going education courses and feedback for teaching practices. Results are printed in disaggregated form for each teacher and delivered in individual envelopes to maintain the information confidential. This makes it possible for teachers to know their results. At present, results from the student achievement factor evaluated using the ENLACE test can be viewed in the SEP Website (Banegas and Blanco, 2005; SEP-DGGE, 2002).

Likewise, the DGEP delivers state reports of IDCIFEN results to authorities requesting them along with the recommendation that they should be delivered to the teachers evaluated in a personalized fashion. General reports contain an introduction about the test’s characteristics, with results charts showing a deep disaggregation level. These results are shown as percentages of correct answers; compare the averages obtained by each participating school, averages from different majors and averages obtained on each area evaluated. In addition, the DGEP conducts a presentation of results to administrators and technical teams of normal schools and some results are published in the SNEE Website. This same Website contains the results by state of the student achievement factor,
professional preparation factor and the IDCIEN, as well as some state documents and reports (Banegas and Blanco, 2005; SEP-DGE, 2002).

Efforts are being made to define teacher training and continuous education based on teacher assessment results. For example, results from the ENAMS have been translated into the formation of a new training offering included in the National Catalogue of Continuous Training and Professional Betterment of Basic Education In-service Teachers (Isoré, 2010; SEP-DGEI, 2010; SEP-DGEP, 2010; SEP-DGFCMS, 2010).

Regarding the use of teacher assessment results for improving their classroom practice, only a minority receives or checks their results and uses them to modify their classroom practices (Banegas and Blanco, 2005). In this sense, there is no evidence of a systematic exercise fostering teacher self-evaluation based on the results.

In 2000, the document Distribution of primary and lower secondary public schools was published based on the level of correct answers provided by students of each teacher in the PNCM tests. Results of the student achievement factor from 1997 and 1999 were used to place all participating schools on five target levels. Likewise, the data from a qualitative research performed on a small sample of schools with high results were integrated, which made it possible to build a profile of effective schools. This document was widely distributed among education authorities, technical areas, administrators and educators of primary and lower secondary schools, the Council of National and State Social Participation, numerous organizations of education researchers and society in general through the SEP Website.

As regard to available statistical evidence about the functioning of teacher assessments, in the case of the PNCM, the IDCIEN and the ENAMS, there is a database with information of all applications performed to date by type of job, educational service, and state (SEP-CNCM, 2010; SEP-DGEP, 2010; SEP-DGFCMS, 2010). As for the PNCM, a statistical analysis is performed from the third stage on with the aim of providing an overview of teacher assessment results and making comparisons according to all six programme factors as well as variables such as age, gender, participation branch, and educational service/level (SEP-CNCM, 2010; SEP-DGEP, 2010). However, there is neither systematic follow up of results or impact studies carried out.

5. POLICY INITIATIVES

Current efforts in matters of teacher assessment focus on the establishment of performance profiles of in-service educators as an initiative registered in the 2007-2012 Education Sector Programme. The DGFCMS is working on the standards for institutional performance of continuous state training services, teacher centres and other units offering programmes, projects and actions of continuous training for in-service teachers (SEP-DGFMCS, 2010).

Since 2002, actions have been taken to update the PNCM general guidelines and strengthen its assessment system, to wit: 1) Regional meetings with bipartite commissions (2002 and 2005); State forums for the professional training of basic education teachers (2204); 3) Analysis and evaluation of score distribution of participating teachers in the professional performance factor (2005); 4) Study conducted by RAND (2005); 5) Comparative analysis of stimuli systems of other countries (2005); 6) National survey about PNCM (2005); 7) Conclusion of an update proposal for the Programme’s regulations conducted by the SEP and SNTE (2006) (SEP-CNCM, 2010). In the ACE framework, an agenda has been established between the SEP and SNTE, seven of the eight points of which have been discussed and agreed upon so far (SEP-UPEPE, 2010)3.

The creation of the PSNFCM, which emerged in the ACE framework, seeks teacher professionalization in terms of a pertinent and relevant offering to their classroom practice to improve student academic achievement. Consequently, the corresponding budget and investment by teacher have increased. Furthermore, in 2009 and in 2010, for the first time different IES were assembled to design and teach courses of the National Catalogue of Continuous Training and Professional Betterment of In-service Teachers, and currently, the DGFCMS is implementing the use of portfolios within assessment processes in diploma courses and competency certification. However, it is still necessary to assess and determine the training programs to decide their permanence as well as the organisation of a follow-up system to the Programme (SEP-DGFCMS, 2010).

Also in the ACE framework, in 2009 emerged and began the Teacher Quality Stimuli Programme whose aim is to encourage teachers’ individual merit in terms of student achievement results. The basis for bestowing the stimuli
are the ENLACE results; therefore, currently it does not cover services in pre-primary, or grades first and second in primary school (AEM06).

Another current effort is being made by DGAIR and DGFCMS since 2009, by issuing norms for defining certification standards and rules for teaching languages in lower secondary schools. The first stage was completed in the 2009-2010 school year; it assessed the linguistic competencies of 6375 English teachers and 5302 Language Certificates were awarded [CENNI]103. Three authorized assessing agencies participated in this process (McMillan-Red Nova, UNAM and Sonora). Certification must be expanded to include the entire country though because there are 26700 English teachers in lower secondary schools. In addition, phase 2 must be initiated; it consists in the professionalization of English teachers based on Secretariat Agreement number 286 (DOF, 30 October 2000) and phase 3 about the certification of language schools via the Official Mexican Standards [NOM] or another alternative, as well as incorporating new international assessing agencies (SEP-DGAIR, 2010). In this same vein, progress is being made in the teachers’ competency certification process “Didactic use of Information and Communication Technologies in the Learning Process: Basic Level”. Ten thousand teachers were certified in 2008 (SEP-DGFMCS, 2010).

In addition, the development of a teacher registry that makes possible their identification by level, modality, zone, branch, school and associate them with the results of their students or the school in which they work. This is an effort of the UPEPE along with the DGEP in order to feed the RENAME (AEF05).

The INEE, in turn, has fostered a number of resources organized around a portfolio through which teachers can personally register and assess their work, and use it as input to establish goals to benefit student education. This tool provides guidance about the information a teacher should gather, guides reflection through specific questions and contains a form to design the improvement plan. For the assessment, the teacher can choose among the following components: a) Excale knowledge showing a lower percentage of correct test components; b) relationship of these results with their students’ learning, and c) content they must reinforce. It is available at the Website of the INEE104. Another effort is a Teaching practice self-evaluation questionnaire for primary education teachers and a Questionnaire Manual105 (INEE, 2010).

6. TEACHER ASSESSMENT CHALLENGES

The efforts described in this chapter show the progress made in matters of the assessment of basic education teachers in Mexico but it is still necessary to steer improvements toward certain aspects mentioned below (CENEVAL, 2010; INEE, 2006; SEP-CNCM, 2010; SEP-DG AIR, 2010; SEP-DGEI, 2010; SEP-DGEP, 2010; SEP-DGFMCS, 2010).

First, constructing a basic education teacher profile in accordance with current study Plans and Programmes that clarifies good teaching standards or references is required. With this profile, it will be possible to determine teacher attributes to be evaluated and, based on that, design standardised tests with different objectives: diagnostic, entrance, egression, job assignment and recognitions, among others. Likewise, this profile would also contribute to teachers clearly knowing what is expected of them and have a frame of reference to carry out a self-evaluating exercise of their performance. This profile must be assembled with the teachers so it can be the basis of a universal teacher assessment system. It would also be useful to develop a profile of educators’ trainers (AEA08; AEM06; AEM09; RPJ10; RPJ11; UNA03; UNS01).

103 For more information about CENNI visit: http://www.cenni.sep.gob.mx

104 For more information about these resources please visit: http://www.inee.edu.mx/explorador/

105 This questionnaire is a tool for primary school teachers to explore, assess, and reflect upon their own pedagogical practice in relation to different aspects that have been shown to be crucial to the teaching practice. The questionnaire assesses six dimensions through 112 test components that are defined according to the review of different discussion material of the teaching practice (results from educational research on teaching processes, teaching literature and primary school curricular material such as teacher books and study Plan and Programmes). A number of traits that characterise an efficient practice were identified in this material, and said traits were written in the form of statements. The six questionnaire sections are teacher work planning, use of resources for lesson development, strategies and activities for promoting meaningful learning, strategies and actions for student assessment, use of assessment results and class environment. The manual contains the following elements: basic information about the theoretical foundation for the instrument's design; considerations and recommendations for its application, grading and interpretation procedures for the information gathered and suggested activities for the utilization of assessment results toward improving the institution. Material is presented in both printed and electronic means.
Second, evaluate the technical quality of teacher-assessment tests, including assessment indicators used, the methodological rigour involved in preparing them and criteria for establishing cut-off points (AEM09; RPJ10; RPS11; SCD04); in addition, improving the operation and structure of current teacher assessments.

Some guiding lines in this regard include avoiding the use of teaching assessment models that have not worked, such as peer assessment; incorporating elements such as the teaching practice, attendance and commitment to the community into the assessment process; aligning the assessment with the teacher’s profile constructed; establishing differentiated requirements to access higher levels in the salary- and work-based promotion systems; ensuring that teachers accessing these systems engage in on-going assessments and provide continuity to updating, training and continuous education efforts; there should exist the option to withdraw the stimulus if assessment is unfavourable; and designing specific instruments according to the stage of teacher development and use given to particular assessment results (AEA08; AEF05; AEM09; AEP05; RPS11; UNS01).

Third, make sure teachers’ assessments follow their classroom work closer, rather than simply performing knowledge and skill evaluations through multiple-choice tests (SEP-CNMC, 2010; SEP-DGEP, 2010; SEP-DGFCMS, 2010; AEM06; RPJ10; SCD04). Thus, it is important to assume that a battery of instruments is required for triangulating information, having a quantitative and qualitative view of teachers’ duties during both their initial and professional training and issue opinions, make solid and reliable decisions about their work performance accordingly. For instance, adding the submission of a portfolio or expert classwork observation to the application of multiple-choice tests that measure knowledge and skills. In this sense, the recommendation is that placement should not be based solely on test results but that assessment should be enriched with other mechanisms, as it is possible for an individual to pass the test but lack sufficient teaching competencies (OECD, 2010).

Fourth, teacher assessment should be accompanied of context questionnaires as well as involve other key people such as principals, parents (SEP-CNMC, 2010; SEP-DGAIR, 2010; SEP-DGEP, 2010; SEP-DGFCMS, 2010). The aim is to evaluate the conditions under which teaching is carried out and avoid making teachers the only people responsible for student success or failure (AEM06; RPJ10; RPS11).

Fifth, make sure assessments are mandatory to all teachers and, above all, have a training purpose for improving their performance (SEP-CNMC, 2010; SEP-DGAIR, 2010; SEP-DGEP, 2010; SEP-DGFCMS, 2010). In this sense, a pedagogical approach to basic education must be encouraged, in which teacher assessment is conceived as eminently educational, as a feedback tool for their work, and a guide for the support they should provide each student based on their progress, their own capacity and circumstances. For summative purpose, it is advisable to look for schemes in which assessment has implications for in-service teachers until their compliance with a second assessment cycle. Thus, teachers are given the opportunity to improve after a first training cycle (OECD, 2009a; RPS11; UNS01). This would prevent the assessment being used as a tool to overcome substandard initial and professional education (UNA03).

Sixth, connect educators’ assessment results and that of professional development programmes (SCD04).

Seven, assume that tests applied to students for diagnostic purposes are not the only parameter for motivating teachers (AEA08; AEM06; AEM09; UNS01). It is valid to use an educator’s student results to get an idea of how well or bad he or she is performing but this indicator does not make it possible to learn the reasons behind the performance quality or shed light about what needs to be done to improve their teaching (RPS11; UNS01).

Lastly, express teacher assessment efforts through an evaluation system that is part of the SNEE. The assessment system must be universal, systematic, periodic, take place once every three years for instance, provide a diagnostic of teachers in terms of their training and current working conditions, allow the accurate assessment of their pedagogical practices, and include different key persons who know the educator (SEP-CNMC, 2010; SEP-DGAIR, 2010; SEP-DGEP, 2010; SEP-DGFCMS, 2010; AEA08; AEF05; AEM09; UNA03; UNP02). The construction of a teacher assessment system is a long-term process requiring careful planning and staged implementation, as well as clearly establishing responsibilities and outlining the functions of each key person involved (AEF05; AEM09; RPS11).
CHAPTER VI. STUDENT ASSESSMENT: IN AND BEYOND THE CLASSROOM

In Mexico, student assessment involves two levels: in the classroom, which includes different evaluations performed by teachers throughout the school year, and at large-scale or beyond the classroom discussed in this chapter as census evaluation efforts for diagnostic purposes, student selection for admission, and student recognition for academic achievement. Regarding classroom assessments, this chapter includes regulations, general assessment guidelines in primary and lower secondary education, support mechanisms for educators and evidence of the characteristics of teaching practice assessment in the classroom. As for the current practices for evaluating student learning beyond the classroom, there is a description of the Instrument for Testing New Lower Secondary School Students [IDANIS], Children’s Knowledge Olympics [OCI] and National Assessment of Academic Achievement in Schools [ENLACE]. Next, this chapter includes variations in the implementation and expression of assessment results, the stages undergone by publication overtime and their use, policy initiatives on the matter, and lastly, current challenges in student assessment.

1. STUDENT ASSESSMENT PRACTICES IN MEXICO

Student evaluation is a systematic process of information gathering and analysis with the aim of determining student achievement level in relation to expected learning, which consists in the acquisition of knowledge, development of abilities and skills and learning about attitudes and values. All of which representing the development of current generic and disciplinary skills set forth in the Plans and Programmes for Primary School (2009) and Lower Secondary School (2006) (SEP, 2006, 2009). These evaluations have several objectives: diagnostic of student knowledge and skills; student learning follow up for a long period to refocus teaching practices and encourage continuous improvement; approval, knowledge certification, student selection for honour roll placement or recognitions; definition of policies and/or accountability to society regarding the education provided to students.

The current government policy for learning assessment is contained in the 2007-2012 National Development Plan and 2007-2012 Education Sector Programme, the former points out the need to foster systematic assessment mechanisms for student learning results as well as that of teaching processes as one of the strategies to elevate education quality. The latter indicates that assessment must be a fundamental instrument in quality analysis, importance and relevance of the design and operation of public policy in education matters. LGE establishes that student evaluation encompasses individual measurement of knowledge, abilities, skills, and in general, achievement of objectives set forth in study Plans and Programmes. They must contain assessment and accreditation criteria and procedures to verify that students are meeting the objectives for each educational level (DOF, 22 June 2009).

Several regulations have been put in place in Mexico for student evaluation process, keeping in mind that it is the teachers’ main responsibility. These regulations are Secretariat Agreements: Agreement number 3810 (DOF, 30 March 1976, no longer in force); Agreement number 17 (DOF, 25 July 1978), which is in force only for upper secondary education and post-secondary non-tertiary education for services depending directly from federal authorities; Agreement number 165 (DOF, 19 August 1992, no longer in force); and Agreement number 200 (DOF, 19 September 1994), which is in force for basic education except for reforms derived from Agreement number 499 (DOF, 4 November 2009).

As for Agreements pertaining to basic education, Agreement number 200, regulates grade scale and assignation, assessment periodicity, publication of assessment results, and pass or fail conditions based on the school grade. In addition, it indicates that it is an obligation of public and private education institutions to evaluate students’ learning using appropriate and timely pedagogical procedures that permit making decisions to ensure efficient learning and teaching based on current programmes and using a 5 to10-point scale on which the minimum passing grade is six for each subject. Grades are assigned and parents informed five times throughout the school year or October, December, February, April and within the last five working days prior to completion of the school term. The administrators must communicate partial grades to students and parents and foster communication among them and educators, as well as pass or fail conditions according to the school grade. The final grade on every subject and annual general point average are obtained by averaging partial grades and final grades from each subject respectively.
In primary schools, grade two to six students move on the next grade if they obtain a final passing grade in Spanish and mathematics and if their annual general point average is greater than or equal to six. In lower secondary schools, if a student obtains a failing grade, they must take extraordinary annual tests or repeat the school year. The student will be able to enrol in the next higher grade as long as they have not failed more than two subjects or development activities after the annual extraordinary testing period from August to September during which they can take up to five tests. Any student who fails six or more subjects or development activities must repeat the entire school year. Likewise, the students who "owe" three or more subjects must repeat the school year (DOF, 19 September 1994).

This agreement also requires teachers to ensure that the function of student learning assessment is formative, systematic, continuous and integral; encompasses the teaching and learning processes; students are evaluated in the context of learning activities taught; assessment strategies, form and instruments foster recognition and achievement in a broad range of knowledge, skills, attitudes and values set forth in study plan; and are part of work programme of the institution. Agreement 499 modifies two articles of Agreement 200, which pinpoints the period for the final assessment stage, assignation of grades and communicating them to the parents.

Current study plans and programmes for primary and lower secondary schools indicate that: 1) there should be a permanent assessment process, 2) an assessment is much more than the assignation of grades, 3) criterion-based assessment must be considered part of the curriculum, and 4) it is necessary to use instruments for criterion-based assessment that make it possible to compare students against criteria derived from their own initial situation (DOF, 26 May 2006; DOF, 7 September 2009; SEP, 2006, 2009).

To achieve the above objectives, educators are trained to perform student assessments in the classroom, mainly at their initial education stage. One of the didactic competencies fostered through the study Plans for university degrees in Basic (SEP, 2002) and Lower Secondary Education (SEP, 2010), is that teachers should know and apply different education process strategies and assessment types that allow effective assessment of student learning and their teacher's performance quality. This competency is developed through one of the curricular map courses called “Teaching planning and learning evaluation”, taught on campus, six hours per week during the sixth semester of the Bachelor's in Primary Education and four hours per week in the fourth semester of the Bachelor's in Lower Secondary Education.

The purpose of this class is for future teachers to review procedures for organising teaching activities and assessing both progress and difficulties in student learning through instruments suitable to content characteristics and for the developmental level of children at the different school grades. In addition, this course teaches them to identify different strategies for acquiring and consolidating knowledge and abilities primary school children should develop; and learn how to assess learning process, the best time to apply standardised instruments, and how to write questions when preparing different tests requiring student reflection to use the knowledge and intellectual skills they have acquired. Lastly, teachers learn to recognise that the main objective of the assessment process is enhancing the teaching process rather than assigning grades alone (SEP, 2002, 2010).

Regarding teacher continuous training and professional betterment in student assessment in the classroom, the 2009-2010 National Catalogue of Continuous Training and Professional Betterment for Basic Education In-service Teachers contains only two topic-related courses: “Assessment to learn in the competency-based approach” and “Master's in education assessment”. However, there are continuous training courses, most of them dictated by IES, which include assessment procedures with new techniques and instruments, such as proof and signature portfolios for evaluating expected learning levels of the study Programme. Assessment is a training line the DGECMS of the SEP encourages and fosters with increasingly more emphasis in all academic programmes it makes available to basic education in-service teachers. At present, a certificate course is offered for grades one through six teachers on the assessment process with the aim of strengthening teacher skills in this field (SEP-DGECMS, 2010).

Large-scale student assessment began in the 1970s when the first tests were used to determine student learning as they entered lower-secondary schools, as well as student achievement for fourth and fifth graders. In 1989 began the systematic use of the Instrument for Testing New Lower Secondary School Students (IDANIS), for sixth-grade students with the objective of determining their basic abilities in three areas, verbal, mathematics and reasoning, as they enrolled in lower-secondary school (SEP-DGE, 1999, 2001).
Another period began in the 1990s with the fostering of learning assessment of students who participated in Compensatory Programmes, outstanding students for awarding recognitions through the reformulation of the Children's Knowledge Olympics Programme, and defining curricular standards. In 2000, educational policy conferred assessment a strategic role as an essential element for planning, following up, and accountability by education authorities, which fostered large-scale student assessment. Within this framework, in 2006, the SEP developed the ENLACE test with the aim of obtaining diagnostics information about the academic achievement of basic school students in relation to current study Plans and Programmes. As for the agencies involved in basic-education learning assessment, classroom evaluation is responsibility of teachers, whereas large-scale evaluation involves the participation of different SEP agencies as well as external bodies. Within the SEP, the unit responsible for these assessments is the DGEP, and at state level, the AEE and State Assessment Institutes and the CENEVAL as a non-governmental agency.

Below, we have included a detailed description of student assessment in the classroom and large-scale testing efforts.

A) STUDENT ASSESSMENT IN THE CLASSROOM

According to the SEP, assessment of student learning in the classroom must have the following characteristics: 1) focus on student performance rather than on their knowledge alone, 2) be considered a resource for identifying student progress level in relation to expected learning, 3) reinforce achievement and focus compensatory actions for correcting and preventing student deficiencies so that it is possible to offer interventions and resources needed for students to attain expected school achievement and complete basic education successfully. Below there is the assessment conceptualisation and guidelines and suggestions to carry it out based on current primary school (2009) and lower-secondary school (2006) study Plans and Programmes.

In the case of basic education, Agreement number 494 (DOF, 4 September 2009) about primary-school Study Plan and Programmes suggests including the learning assessment component as part of the didactic project work, which is conceptualised as a set of actions oriented toward gathering information about what students learn during the educational process in terms of their experiences in the classroom, with established didactic purposes. As for the guidelines, student assessment should not be based merely on final work results but achievement made throughout the entire process. Product assessment must contain sufficient formal and communicational elements and show the learning achieved by students. The purpose of both types of assessment, the process and the product, is to provide feedback to the key parties involved in the teaching and learning process (DOF, 4 November 2009).

As for lower-secondary education, current study Plan and Programmes include specific recommendations for student learning assessment. Assessment is conceptualised as a process used for the “permanent gathering of information and through different means that would make it possible to pass judgments and perform timely applicable actions to help said performance” (SEP, 2006, p.53), which assumes a formative and continuous nature of the above.

It also contains general guidelines in relation to assessment: 1) assessment is more than just testing at regular intervals, 2) different types of tests are necessary – multiple choice, closed, and open-ended questions, etc. – and each teacher must prepare them by taking the group's characteristics into consideration, 3) it is recommendable to compare results with observation notes, student workbooks, and work portfolio or folders, control list or anas, among others, 4) the teacher must explain the criterion-based assessment they will be using, 5) students must assess their own work and that of their classmates, 6) an assessment allows the teacher to describe the learning process and comply with the responsibility of assigning a numeric grade, 7) the grade can be accompanied by a brief description of achieved learning, and 8) it is relevant to share student assessment results with students, parents and other teachers.

Likewise, each subject's programme establishes specific proposals about aspects that can be assessed and are included in the section “Expected Learning”, which explains what students must learn in terms of the five blocks of the school term and constitutes an essential guide for assessments prepared by teachers. These elements are also 206 Although the purview of CENEVAL is upper secondary and higher education, it is included in this section because it has some participation in the assessment of basic-school student learning, as explained in this Report.
included in Agreement 384, the basis for establishing current study Plan and Programmes for lower-secondary schools (DOF, 26 May 2006; SEP, 2006).

Consequently, the SEP has designed different support mechanisms to encourage the incorporation of this conceptualization and guidelines by teachers in their daily work. Some of these mechanisms are books for teachers, textbooks and the SEB Website, which makes available research articles about assessment, assessment indicators, and Internet Websites about assessment to educators.

Classroom assessment must be aided by official educational material (DOF, 19 September 1994). Primary and lower secondary school textbooks corresponding to the Comprehensive Reform of Basic Education [RIEB], promote three types of assessments: diagnostic, formative and summative. Educational material for students are based on content listed in the study Plan and Programmes establishing life skills as the linchpin of all subjects. Each curricular subject contains competencies to be developed, purposes and expected learning, which are defined as statements including the basic content students must learn in order to access increasingly more complex knowledge in a learning context.

For the previous reasons, performance criteria set forth in educational material is the expected learning, assessed on achievement levels, which at this time match reference standards. In addition, assessment proposals are oriented toward evaluating procedural and attitudinal content strengthened in each respective block. However, although in-classroom learning assessment matches curricular content, assessment procedures are usually insufficient for assessing the development level of expected student learning (SEP-DGME, 2010).

In regulation matters, it has been established that teachers should start with a diagnostics assessment and engage in on-going assessments throughout the school year. Although the nationally applied Agreement 200 regulates assessment, each teacher and school establishes different procedures, instruments and resources to provide themselves with relevant qualitative and quantitative information in relation to their students' progress and academic achievement. Teachers have complete freedom to determine, interpret, register and use different assessment elements. This means assessment differs not only from one region to another or from one school to the next but even from one classroom to another inside the same school (Picaroni, 2009; SEP-DGAI, 2009, 2010; SEP-DGDC, 2010; SEP-DGEP, 2010)107.

Some studies on learning assessment in Mexican basic-schoo1s reveal that teachers perform assessments based on study Programme objectives. However, they spend little time on learning assessment in comparison to that spent on teaching and classes, which can mean that criterion-based assessment and procedures used do not necessarily evaluate student learning in a comprehensive and solid fashion (Garcia, Mejia and Meza, 2009; Loureiro, 2009; Picaroni, 2009).

In this sense, teacher assessment of student learning is a practice frequently restricted to the measuring process with the aim of grade accreditation or level promotion. It is usually performed based on teacher judgment and devoid of standardised procedures, criteria or parameters. Norm referenced test108 is widely used but it does not leave room for assessing actual student learning progress in terms of curricular objectives or study Plans and Programmes objectives.

107 These are two examples of assessment practices in the classroom for two primary-school subjects: Spanish and Mathematics. In Spanish, teachers assess reading comprehension and writing. The former is evaluated through written summaries and questionnaires based on narrative and descriptive text; however, these activities generally gather literal information and seldom demand higher skills from students, such as inferences, generalisations and integration of information. Assessment of the latter focuses on formal or conventional aspects of the language, including grammar, orthography, segmentation and punctuation, as well as neatness and calligraphy. Bimonthly assessment is performed through close-ended or multiple-choice tests focused on two of four curricular axes: reflection about the language and reading. Language reflection is assessed through aspects of orthography, punctuation and verb conjugation, whereas reading is through questions, synonyms and antonyms, definition writing and rule enunciation. Few activities require the product of written texts (Díaz Barriga and Hernández, 2002; Loureiro, 2009). It is important to mention that teachers do not prepare some of these texts; the use of didactic guides prepared by commercial publishers is common practice. Furthermore, there are tests advertised as “based on the guidelines of the Enlace test” (Loureiro, 2009, p.56). For Mathematics, there is also on-going assessment based on exercises contained in different books, from both official and commercial publishers, as well as bimonthly assessments through tests focused on problem solving using the basic operations. The thematic axes assessed mainly are writing quantities larger than six figures with numbers and letters, positional value exercises, solving basic operations with decimal quantities, representation of fractions and operation solving with common fractions, and to a lesser extent, treatment of information and geometry. These assessments emphasize final results but not the processes students developed to reach them. They are characterized by simple knowledge-application exercises and seldom authentic activity proposals are put forth in meaningful contexts whose solution implies more than one strategy, requires students to make decisions and involves different knowledge and skills (Loureiro, 2009; SEP, 2003).
Report of Basic Education Assessment Practices in Mexico, 2010

As for the instruments used to assess student learning, the most commonly used to perform summative assessments of each period are written tests, especially multiple choice, questionnaires and oral exams. Other complementary inputs for this assessment are performance observations, written work – summaries, class notes, presentations, essays, information search and laboratory reports – class participation, behaviour or discipline, written assignments, work or task neatness, team work, attendance and/or willingness to work. To a lesser extent, teachers use instruments such as portfolios, rubrics, reasoning exercises and/or problem solving, case studies or performance tests. The weight assigned to each element varies even from one bimonthly period to another depending upon academic content and activities carried out. In many cases, the weighing of these elements is not made clear and tests have more weight in the bimonthly grade (Garcia et al., 2009; Loureiro, 2009; Picaroni, 2009).

These grades are written on an assessment card or grade registry, which shows the students' academic achievement after each period and at the end of the school year. The current card's design corresponds to the 1993 study Plan curriculum: Secretariat Agreements 181, 304, 438, and the assessment scheme set forth in Secretariat Agreement 200.

The criteria to determine successful completion of a school year are governed by the School Control Standards for Enrolment, Re-enrolment, Accreditation, Regularisation and Certification for Basic Education issued by DGAIR, which are based on LGE and previously described Secretariat Agreements. The objective is to establish the norms basic education schools must apply during student enrolment, re-enrolment, accreditation, regularisation and certification (SEP-DGAIR, 2009)\(^{108}\).

Accreditation norms comply with requirements set forth in the corresponding rules for recognition of subject completion, school grade, whereas the purpose of that pertaining to certification is to provide official recognition of learning acquired by students in accordance to study plans and programmes for basic school education. In both cases, there are established norms, documents, formats and functions of those responsible for complying with this task at the beginning, during and end of the school year (SEP-DGAIR, 2009).

As for the use of results from classroom evaluation, the results of formative assessments are used to reorient the teaching practice and those from summative assessments are used for student accreditation. Considering the diverse criteria and procedures each teacher employs to assess their students, thus far, it is irrelevant to compare assessments performed, for instance, in a school, school district, municipality or state to make decisions beyond the classroom. In addition, so far there are no vigilance mechanisms for how teachers grade from one classroom to another or one school to another. (SEP-DGEP, 2010)

B) STUDENT ASSESSMENT BEYOND THE CLASSROOM\(^{109}\)

INSTRUMENT FOR TESTING NEW LOWER SECONDARY SCHOOL STUDENTS [IDANIS]

The IDANIS is a standardised learning assessment instrument for grade six students to determine their basic learning skills and profile as they enter lower secondary schools, as well as how to distribute them in lower secondary schools; therefore, it has two functions: diagnostics and summative (SEP, 1999, 2001; SEP-DGE, 2002). The IDANIS is made up of 60 multiple-choice test components and 3 sections: verbal skills, which covers reading comprehension and sentence completion; mathematics skills, which covers arithmetic and geometry, and abstract reasoning skills.

In 1989, it was applied in two states and in 1991, it was applied in 16 states and used for student registration census. Currently, it is applied only in states requesting it, results are analysed by the DGEP and results are reported by school, which includes the global percentage of correct test components and of each area per student. The DGEP Website posts a historic result series, disaggregated by each participating state. These results are accompanied by documents that help report writing in the schools\(^{110}\).

Based on the global percentage of correct answers and by diagnostic unit, four achievement levels have been determined (A, B, C and D), which are described qualitatively and associated with a number of recommendations.

\(^{108}\) For more information about these norms please visit http://www.sep.mx/work/sites/sep1/resources/LocalContent/129130/1/normasbasica20092010.pdf

\(^{109}\) The information in this section was obtained from the following sources: Backhoff et al., 2006; Backhoff and Díaz, 2005; Banegas and Blanco, 2005; GTEE-PREAL, 2007; INEE, 2006, 2006'; Martinez Rizo, 2008\(^{a}\), 2008\(^{b}\); SEP, 1999, 2001; and SEP-DGE, 2002.

\(^{110}\) For more information about IDANIS please visit http://www.dgep.sep.gob.mx/BROW-AES/indice_Idanis_habilidad.htm
These results are obtained individually, by group, shift or school, but it is not appropriate to compare achievement levels because complementary context questionnaires are applied only in the Federal District.

In 1996, operative definitions were presented to users to support the test in the document *Instrument for Testing New Lower Secondary School Students in 1996. Profile of new population. Elements for its construction*. These definitions were modified in 1999, same year in which the first document with theoretical and technical information from the IDANIS was published (SEP, 1999). Similar publications were developed about the theoretical skills measured by the test using the abovementioned efforts (SEP, 2001). This demonstrates the participation of IDANIS throughout its implementation and in technical aspects because in 1999 The Item Response Theory, specifically the Rasch Model, was incorporated for analysis of test components for application in the Federal District (SEP, 1999, 2001; SEP-DGE, 2002).

**CHILDREN’S KNOWLEDGE OLYMPICS [OCI]**

The Children’s Knowledge Olympics [OCI], reformed in 1993, is a contest carried out nationally with the aim of recognizing the academic preparation of outstanding sixth-grade students of private and public primary schools affiliated to the SEP, as well as tertiary level from community courses based on a system of incentives and scholarships.

The granting of these awards involves the application of a multiple-choice test that assesses the knowledge acquired in relation to current study programmes for sixth grade, textbooks and educational material for Spanish, Mathematics, Science, History, Geography and Civics. The test emphasises the use of information, principles and procedures of said subjects as well as reading comprehension and problem solving in mathematics. Results are presented as the average of correct answers based on a globalised, state-wide database and the state average is compared to the national mean as well as averages from the states that obtained the highest and lowest results.

The contest dates back to 1961, with the SEP in charge of its organisation; an invitation is published annually on the Website of this Secretariat. The contest is carried out in three stages: by zone, by sector and by state, all of which take place in February, March and May respectively. Its application means a significant coordination of efforts as it involves the participation of several institutions and education authorities from all 32 states. The DGEP is in charge of the design, application and analysis of the test results at state level. In addition, there is a Committee of representatives from the states and different SEP divisions. The awards are given in the form of scholarships, cultural interactions and trips, among others. The results are published through the SEP Website and a code or document number is necessary to access them.

**NATIONAL ASSESSMENT OF ACADEMIC ACHIEVEMENT IN SCHOOLS [ENLACE]**

In 2005, the SEP developed the ENLACE test to assess student learning in basic schools, which constitutes a significant turning point in educational assessment. ENLACE is an objective and standardised test applied annually since 2006 in all primary and lower-secondary schools in the country with the purpose of gathering diagnostic information about the academic achievement of students on topics and content established in current study Plans and Programmes.

It is oriented toward grade three and six primary school students and all three lower-secondary school grades – it was initially applied in the last lower-secondary grade and in 2009, all three lower-secondary school grades were incorporated – and upper secondary education since 2008. This test assesses curricular content of Spanish, Mathematics, and a third subject was included in 2008, which changes every year: Science in 2008, Civics and Ethics in 2009, History in 2010 and in 2011 it will be Geography. For this reason, the tests are aligned with the curriculum in force, are applied annually, used for student registration census, and are formed by multiple-choice test components, 50 at a minimum and 70 at maximum for each subject. The test is taken over two days, each session lasting 45 minutes. Table 1 shows the number of schools, students and subjects assessed in each application.

111 To see the results of this test in a particular state, please visit http://sig.jalisco.gob.mx/evaluacion/
The assessment process’ technical quality is responsibility of a Technical Board formed by specialists from academic institutions, non-governmental organisations and the SEP. In fulfilling its mission, the Technical Board has formed five academic groups for designing and developing the technical test components: 1) Reference profiles, tables and tests, 2) Equivalency studies, 3) Logistics, 4) Analysis of results and 5) Publication of results. Other participating agencies are CENEVAL, the National Commission for Free Textbooks, and FLACSO, all of which collaborate in activities such as preparing test components, printing and distributing assessment material and conducting educational research.

The Technical Board establishes grading criteria and students are placed at four performance levels: “insufficient”, “basic”, “good”, and “excellent”. “Insufficient” level students lack the necessary knowledge and skills to continue learning the respective subject at proper pace. “Basic” level students are proficient in only a small part of the knowledge and skills assessed in a subject and school grade, but sufficient to continue learning satisfactorily. “Good” level students are proficient in most of the information and skills assessed in a subject and grade. “Excellent” level students are proficient in all information and skills assessed in a subject and school grade.

ENLACE test results are disaggregated by school, by group, by student and by discipline, which makes it possible to hierarchize them. These results provide useful information for the SEN assessment because they are academic and contextual results about Mexican students and schools and can be taken into consideration for analysing, assessing and interpreting SEN component status. In addition, these results can be coordinated with the national education planning, information and indicators introduced in Chapter 3. A complete and comprehensive information system with different aggregation levels will make possible a much more global and effective direction of the educational effort (SEP-DGEP, 2010).

These results are widely published through different means: a) printed reports containing individualised diagnostics for parents, as well as by group for teachers and school administrators, b) posters for the educational community containing the results of the school's students assessed, and c) query system for results on line. Using this system, the school's headmaster and the teacher can find out each student's results by test component, identify right and wrong answers, as well as recognise the topics causing problems to students. With this information, both teacher and students can determine strengths and areas of opportunity to orient their class work.

The intention of the SEP is to utilize these results in the implementation of public policy, lesson planning, review of training requirements for teachers and school administrators, parent involvement in educational tasks, and accountability. It is currently working so it is possible to compare results from grades three to six in primary school (vertical comparability), as well as grades one through three in lower secondary schools to establish the educational gain or progress of students and schools throughout this period.

As for the test’s relevance to indigenous communities, the DGEI has developed accompanying work seeking to guarantee its linguistic and cultural bearing (SEP-DGEI, 2010). For students with special educational needs, there is a minimum degree of adaptation in ENLACE, in only two ways in the application process. First, allowing a relative to help the student answer the test based on their specific needs without it implying that answers are provided to them. Second, assigning an application aid that, depending on the specific student need, helps them by reading the questions and filling the answer sheet (SEP-DGEP, 2010).

2. VARIATIONS IN RESULT IMPLEMENTATION AND COORDINATION

Learning assessment of basic school students in Mexico has changed significantly in the last four decades. Efforts from federal, state and external agencies are in a consolidation stage and there is better coordination of said efforts.
In addition, increasingly more value is given to the importance of these assessments as sources of information for making decisions that make it possible to improve education achievement levels and follow up on student performance. However, systematic mechanisms for connecting results from different learning assessments with other student assessment and other components of the assessment structure do not exist. Test implementation and application variations based on educational services or adaptations for students with special educational needs are not in place.

The predominant approach for classroom learning assessment is incipient in comparison to approaches to learning assessment tests applied nationally and internationally because only recently study plans and programmes for basic education and teacher training programmes have begun incorporating specific guidelines and material for classroom learning assessment.

It is important to mention the support provided by INEE through the publication of documents on assessment practices for students in classrooms112, workshops for test preparation and publication of work from renowned authors in the field, as well as recent SEP efforts for suggesting classroom assessment practices through its Website.

The DGEP in turn, through its participation in large-scale learning assessment such as ENLACE and PISA, has consulted international experts, organisations and groups for technical training in test design as well as proper analysis and interpretation of assessment results. Furthermore, it has written technical manuals for test application (e.g. Technical manual for ENLACE), and offered courses for strengthening capacities of state assessment divisions on test component design, psychometrics and database analysis.

3. PUBLICATION AND USE OF RESULTS

In Mexico, there are three distinct periods for the publication and use of learning assessment results (INEE, 2005b; Martinez Rizo, 2008b). The first period covering from 1970 through 1990, was characterised by an almost nil publication of results at federal and state level because it was deemed confidential information. For this reason, results were not used for providing feedback to the SEN or making decisions in matters of education policy. Publication for teaching and administrative personnel, families and society in general was non-existent as well. The only results published, among test takers or examinees and their families, due to the assessment's summative nature, were IDANIS results because it was a selection test.

The second period, during the 1990s, saw greater publication of results among national and state education authorities. Publication of results began among teaching and administrative school staff, parents, and society in general. However, assessment results were not considered an input for making decisions oriented toward improving pedagogical practices and, occasionally, results were simplified or interpreted incorrectly. Although learning assessment received a major boost, the publication of results was not deemed essential (GTEE-PREAL, 2007; Martinez Rizo, 2008b; SEP-DGE, 2002).

With the creation of INEE in 2002, began the third period oriented toward more broad publication to different key figures in education with the objective of providing feedback to teaching and learning processes, informing decision-making in matters of educational policy – renewal of study Plans and Programmes, foster teacher training and continuous education, development of educational material – and being accountable to society about the education provided to students. An example of this is that learning assessment has been accompanied by a growing interest in results being widely published, such as those of the ENLACE test, and used to inform decisions that contribute toward the enhancement of education quality.

In the specific case of ENLACE, all schools are sent documents titled “Suggestions for the pedagogical use of ENLACE results” whose main objective is to be a pedagogical-technical tool that enables teachers to plan and improve their daily professional practice and help enhance the quality of classroom learning (SEP-DGEP, 2010).

The UPEPE has suggested public policy actions in six areas for promoting the use of ENLACE results: 1) activities to increment parents’ capacity to help their children such as parent workshops and reinforcement of education content at home; 2) actions to encourage a culture of educational assessment in the classroom through support material for teachers and the exchange of experiences and good practices between teachers and states; 3) training and

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continuous education activities such as expressing the continuous education offering based on ENLACE results and tests taken by educators; 4) special actions oriented toward educational lag. For example, the DGDGIE created an Emergent Programme for Education Achievement to strengthen schools with low academic results and there are Modules for Comprehensive Specific Academic Reinforcement [MIFAE] to attend the main improvement areas; 5) actions for strengthening educational management, such as establishing learning standards and achievement expected by basic education level and grade; and 6) promote other programmes that further education quality, such as “Better Basic Education for All”, “National Programme for Pedagogical Advisor Professionalization” and “Programme for the Transformation and Strengthening of School Supervision” (SEP-UPEPE, 2008).

It is important to point out that parallel to the use of the aforementioned, the ENLACE results have been used for publicising school rankings in the media, granting of monetary incentives to teachers based on students’ scores through the PNCM, and publicly recognizing students with higher scores. Using the results for purposes other than those used to create the test may be causing schools and teachers to put too much attention on student learning outcome, which can lead educators to teach for the ENLACE test and parents to see as their duty training their children to answer it (Backhoff et al., 2008). This distorts the test's objective (Loureiro, 2009).

This also highlights the need for reorienting the efforts of parents, teachers, students and society at large not only toward better test results but also on improving teaching and learning practices to attain quality education in the country. Focalized programmes have been established using these assessments, such as a strategy to reinforce teacher professionalization in schools with recent low performance in ENLACE tests. In addition, the programme “Skills for the Mexico We Want” was developed with the aim of bringing lower-secondary students and teachers closer to standardised assessment methodology, test-component building and the logic to approach them (SEP-DGEP, 2010).

Lastly, great efforts have been made at state level to use ENLACE test results. In at least six states – Aguascalientes, Baja California, Baja California Sur, Colima, Nuevo Leon and Sinaloa – studies have been carried out to analyse jointly and in-depth the state-wide results of basic education students in the ENLACE test.

In some states, complementary studies are performed based on ENLACE results. For example, in Baja California, schools with high academic achievement and low-test results are identified to perform case studies that analyse factors associated with education achievement. In other states, such as Baja California Sur and Sinaloa, there are workshops to promote analysis and use of the results by educational authorities for school improvement. In Nuevo Leon, classroom assessment practices in primary schools are analysed. In Baja California and Colima ENLACE results are associated with results from other tests or other indicators of achievement, grade completion, desertion and completion rate. These studies have been carried out from 2005 to date and in some cases involve efforts at regular intervals. It is important to mention that the abovementioned efforts constitute a significant step toward a culture of using the results of educational assessment at state level (see Annex L)\(^{113}\).

### 4. POLICY INITIATIVES

The DGDC and DGAIR, in coordination with the INEE, are designing a proposal for student learning assessment in the classroom because of the need to consolidate and specify the directions provided to teachers in Secretariat Agreements, current study Plans and Programmes, books for teachers and support material so that educators have the tools necessary for comprehensive and solid student learning assessment.

Furthermore, there are other SEP initiatives in the planning stage, not yet developed or implemented, for improving student assessment effectiveness and elements that those assessments must consider (SEP-DGAIR, 2010; SEP-DGEP, 2010; SEP-DGME, 2010).

The initiatives are the following:

- a) Reform the grading scale to achieve greater international comparability.
- b) Reform classroom assessment scheme for expected or standard learning

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\(^{113}\) This information was obtained expressly for this report from State Secretariats of Education, which does not preclude the existence of other meaningful studies in other states.
c) Reform the assessment report (school report) so that parents, students and educators understand the scope of specific results in relation to the group, school, state and country.

d) Reform Agreement 200 in assessment matters so that the changes reflect an assessment model that enables interaction with assessment schemes from other countries without losing its national identity.

e) Vertical comparability to generate educational gain from ENLACE and follow up on student performance.

f) Design reference criterion-based assessment, standards, and performance profiles for students in each school grade in relation to expected learning contained in current study Programmes. This will be implemented during the 2011-2012 school year (SEP-DGDC, 2010; SEP-DGEP, 2010)\textsuperscript{114}.

In terms of the latter, assessments performed by teachers must be redesigned based on study plans and programmes in force and the basic education graduation profile\textsuperscript{115} must be adapted to each grade and educational type. In this framework, the SEB is designing the student performance profile of each school grade (SEP, 2006\textsuperscript{a}, 2009\textsuperscript{b}), which will, in turn, allow a stronger connection among the three educational levels in basic education.

In addition, the SEP is working on RENAME, as explained in Chapter 3. Its aim is to concentrate general information and in the context of each student, as well as that from school achievement at every grade and educational level, and compare results obtained from assessments applied by each teacher with external assessments such as the ENLACE test (SEP-DGAIR, 2010).

Finally, based on ENLACE, for the last four years an added value study has been developed about grade information (3, 4, 5 and 6) to see how much each school contributes to every school grade. Also under development, a study about the test's predictive value and measure to what extent it assesses the PISA skills (SEP-DGEP, 2010).

5. STUDENT ASSESSMENT CHALLENGES

As noted in this chapter, in Mexico, student assessment has advanced in terms of approach because it favours assessment of skills acquired over rote learning and enables feedback to learning and decision-making processes toward improvement, such as designing teacher continuous training plans and identifying schools with lower academic achievement toward the joint implementation of actions to enhance education processes. It also promotes reflection on education practices and allows the improvement of textbooks, as based on the assessments a number of test components designed to assess expected learning were incorporated at the end of each block.

Some of the recommendations for on-going improvement of student assessment are: more comprehensive research into the technical limitations of currently used tests, as well as the model used for analysing results; encourage the use of assessment results in the teaching practice; create the bases for an assessment culture toward fostering a better connection between the test's objective and the use given to results; evaluate the impact of these assessments in a systematic fashion; make clear how different student assessments are articulated based on objectives and purposes pursued; promote in-depth adaptation of tests for students with special educational needs; and advance reforms so that results from assessments made by teachers are more objective (SEP-DGAIR, 2010; SEP-DGDC, SEP-DGEP, 2010; SEP-DGME, 2010). In addition, there are the following challenges.

\textsuperscript{114} The Working Group on Standards and Assessments [GTEE] is in charge of developing standards for every subject by school year. This is a pressing task because these will be the guiding elements for test and strategy development for assessing school learning as well as the evaluation criteria.

\textsuperscript{115} At present, the basic school graduation profile indicates that students must demonstrate the following characteristics because of their basic school education: a) Use of oral and written language to communicate clearly and fluidly and interact in different social and cultural contexts. Furthermore, they have basic tools to communicate in an additional language; b) Provide arguments and reasons when analysing situations, identify problems, ask questions, put forth opinions, propose solutions and make decisions. Weight reasoning and evidence provided by others and, consequently, can modify their own point of view; c) Seek, choose, analyse, evaluate and use information from different sources; d) Interpret and explain social, economic, financial, cultural and natural processes to make individual and collective decisions for the common good; e) Know and exercise human rights and values favouring democratic life, act and advocate social responsibility and lawfulness; f) View and practice interculturalism as enriching and as means of interacting in social, ethnic, cultural and linguistic diversity; g) Know and value their characteristics and potential as human beings; know how to work as a team; recognise, respect and appreciate the diverse capabilities of others, endeavour to complete personal or collective projects; h) Promote and assume responsibility for healthcare and environment as conditions favouring an active and healthy lifestyle; i) Make the most of technological resources at their disposal, such as means for communication, obtaining information and building knowledge; j) Recognise different forms of art, appreciate aesthetic dimensions and are capable of expressing themselves artistically (DOF, 26 May 2006; DOF, 7 September 2009; SEP, 2006\textsuperscript{a}, 2009\textsuperscript{b})
First, generate stronger teacher guidance on how to assess student learning in the classroom. Although Secretariat Agreements, university study Plans for initial teacher training, continuous education and professional betterment courses and educational material provide assessment and accreditation guidelines and criteria, more elements and general and specific recommendations at different levels are necessary so that the professional opinion of teachers is accompanied by solid proof and their subject knowledge is actually practiced in the classroom (AEM09; SCD04).

Second, make sure authorities and society in general know the purposes of and valid possible inferences from the results of every measuring instrument (CENEVAL, 2010). In this sense, more technical and assessment knowledge is needed among users and potential audiences to see reasons warning how easily the use of student assessment can be distorted (AEA08; AEF05; AEM06; AEM09; RPJ10; RPS11; SCD04; UNF02; UNS01).

Third, expand knowledge on the technical and methodological quality of tests currently used among interested audiences that use the results but lack expertise in these matters, as well as continue working in improving the tests' technical quality (AEM09; UNA03).

Fourth, the material published and language used in them should be oriented toward multiple result users, such as parents (AEM09). Similarly, it is recommendable for the results to have greater content rather than statistics alone to encourage the use of assessment results by various audiences, hence, have a greater impact (AEF05; SCD04).

Fifth, the interpretation of test results should consider, through context questionnaires, the diversity of cultural and linguistic contexts in which Mexican students develop in order to ensure suitability and legitimacy (SEP-DGAI, 2010; SEP-DGDC, 2010; SEP-DGEI, 2010).

Seven and last, coordinate different student assessments made in classrooms and at large scale, ENLACE and Excale, for instance, as well as achieve a converging point between teaching and large-scale assessments to prevent a gap between educational policies and didactic problems at school. In this sense, it is recommendable to reflect upon how to articulate for the viability of all on-going student assessment projects: classroom, large scale and other SEN components. In addition, how to reverse poor interpretation and uses of assessments given that society has become accustomed to certain practices? The answers to these issues could be part of the duties of the new agency that assumes responsibility for coordinating and expressing current and future assessment efforts and practices of the SEN in basic education, which have already been mentioned in Chapter 2 (AEM09; UNA03; UNF02).
CHAPTER VII. OTHER ASSESSMENTS. FEDERAL EDUCATION PROGRAMMES

In Mexico, in addition to the SEN efforts to contribute assessment elements and assessment practices regarding specific components, such as schools, educators and students, there are assessments of study plans and programmes, such as the pedagogical reform in pre-primary education; of education policies, such as implementation assessment of policies for indigenous education; of education material, such as free textbooks; and of federal education programmes (see Annex M). This chapter is about federal education programmes because since 2007, there is a federal proposal for assessing governmental actions in social development matters, of great transcendence and relevance, in terms of design and results, efficacy and impact, and transparency and accountability in relation to the use of public resources by the federal government.

At the SEN, there have always existed programmes\(^{9}\) intended to foster the improvement of education quality requiring a number of inputs and activities organized around a specific purpose. These include material elements as well as didactic resources and equipment and training and consultancy activities for their implementation to strengthen school operation conditions and/or promote pedagogical or management innovations. In general, the SEB operates the programmes involving basic education students, CONAFE the compensatory actions, participation of individuals or operated by SEDESOL as Opportunities. The first two are federal education programmes\(^{116}\). It is important to mention that these programmes differ in nature and level of complexity.

In the 1990s, pursuant to the 1983 General Planning Law (DOF, 13 June 2003), compensatory programmes were advanced, which emerged before decentralisation and with the drive of modernisation, upon reception of resources from the International Bank for Reconstruction and Development of the World Bank\(^{117}\) (BIRF) and Inter-American Development Bank (BID), to finance efforts for improving the offering and strengthening the education demand of the country’s more disadvantaged sectors. The CONAFE, through the Compensatory Programme Unit (UPC), has organised and operated these programmes whose aim is to ensure that the school-age population has the possibility of fully exercising their right to education under equal conditions and equal opportunities that allow them not only access but also permanence and completion of their basic education (Article 14, DOF, 22 June 2009). At state level, State Coordinating Units (UCE) operated them in collaboration with education authorities.

Compensatory programmes represent an essential tool for redistributing public spending in matters of educational equality. In the past 14 years, five programs have been designed for reversing the effects of educational bias in rural and indigenous areas\(^{118}\): Programme to Reduce Educational Lag (PARE 1992-1996); Early Childhood Education Development Project (PRODEI 1993-1997); Programme to Reduce Lag in Basic Education (PAREB 1994-2001); Comprehensive Programme to Reduce Education Lag [PIARE 1995-2001]; and Programme to Reduce Lag in Early Childhood and Basic Education (PAREIB 1998-2006). Current ones support services for non-school based early childhood education and the basic education system (pre-primary, primary and distance lower secondary or telesecundarias) in all 31 states (CONAFE, 2010).

Of these programmes, PARE and PAREB pioneered the inclusion of the assessment component for accountability. For PARE, the first programme assessed in Mexico, learning tests were taken by chosen students to determine the programme’s impact on learning, improve the quality of assessment procedures used by educators and encourage school self-assessment. This effort gave rise to the DGE implementing a number of technical assistance measures.

In 1994, in the PAREB framework, the Primary Education Assessment Programme [EVEP] was developed with the objective of expanding test application to obtain information and generate historical series of learning levels not only in the states using compensatory policies but also in the entire country. The first test was in 1996, and covered Spanish and Mathematics among grade three and grade six students, along with context questionnaires to parents.

\(^{9}\) For more information about the participating programmes or programmes operated by the SEDESOL, please visit http://www.ineec.edu.mx/images/stories/Publicaciones/Informes_institucionales/2008/Completo/informe2008a.pdf

\(^{116}\) The International Bank for Reconstruction and Development of the World Bank (BIRF) is one of the five institutions composing the World Bank Group.

\(^{117}\) Each of these programmes was established in response to every state’s specific conditions with the aim of providing better education options to rural and indigenous populations with more marked economic and social limitations and needs, and the education lag manifests itself as a product of adverse conditions, such as: extreme social marginalisation, little or no investment in infrastructure, lack of educational material essential to the learning and teaching processes, the prevalence of schools with incomplete organizations or one-room schools, as well as teaching practice characterised by absenteeism and excessive rotation, not because of lack of teachers’ willingness to work, but because of the lack of stimuli, training, continuous pedagogical training and an effective supervision process (CONAFE, 2010).

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teachers and administrators. Later, the number of areas assessed was expanded, five tests were applied in a school *panel-sample* up to the year 2000, and the results, disaggregated in various forms, were published in the SEP Website. This was the first attempt to conduct an exhaustive learning assessment and it contributed to the strengthening of the AEE in terms of personnel training.

Since 2001, there have been programmes derived from and aligned with the objectives and goals of the 2001-2006 *National Education Programme*; and 2007-2012 *Education Sector Programme* in the education sector at federal level. These federal programmes are not dictated by each government administration, but rather the SEP designs and manages them, and they do not modify the SEN basic operational norms or that of the schools; although, they do require great operational and adaptation efforts from state authorities, educators and school administrators. It has generated the creation of technical state teams to run them. A good example is the PEC implementation, which is still in force; hence, it is a multi-mandate programme. Its implementation signifies an important change in relation to the type of initiatives previously developed for reforming education management in Mexico. In addition, it is the first programme to have operational rules; the first one assessed from its inception; and the subject to different types of assessments from one year to the next119. The rest of current programmes are at different developmental stages in relation to assessment, and the PEC continues to be the one with the greatest scope in matters of programme assessment in Mexico, so it will be included as an example further on.

In 2004, the conception of the social development6 policy came to be in the General Law on Social Development [LGDS], which sets forth actions for the National Social Development Policy (Article 1, section VIII, DOF, 20 January 2004), as well as the existence of a National Social Development System [SNDS]120 as the mechanism for attendance, collaboration, coordination and agreement of federal, state and municipal government and social and private sectors (Article 1, section III, DOF, 20 January 2004). This Law establishes education sector policy and states that compulsory educational programmes are a priority and of public interest (Article 19, DOF, 20 January 2004); therefore, education sector programmes have an important role in the federalisation scenario and become an instrument through which the federation can continue channelling resources earmarked for education.

This Law contains programme assessment and follow-up mechanisms (Article 1, section VIII, DOF, 20 January 2004), with a direct reference to the Federal Law for Budget and Tax Responsibility (DOF, 30 March 2006). The latter defines a regulation framework to be followed by the Ministry of Finance and Public Credit (SHCP), the Secretariat of Civil Service (SFP) and CONEVAL, in matters of Federal Programme Assessment. This regulation framework became more specific with the publication of *General Guidelines for Assessing Federal Programmes of the Federal Public Administration*, whose purpose is that assessment and monitoring of federal programmes should be contemplated in the Expenditure Budget of the Federation each year, contribute to fostering result-based management and consolidate the Performance Assessment System [SED]. Federal Programme Assessment is a key component of the SED, as it strengthens all methodological elements that permit the realization of an objective assessment of programme performance under the principle of degree of goal and objective compliance, based on strategic and management indicators to determine the social impact of programmes and projects (SEP-UPEPE, 2010).

These guidelines regulate federal programme assessment, oversee the construction of a results indicator matrix [MIR]10 based on the Logical Framework Approach and monitoring systems designed and followed up by the SHCP, as well as the establishment of strategic objectives of states responsible for the programmes (DOF, 30 March 2007). The MIR is part of the SED. With this system, responsible groups report progress and results of indicators as per indicated time and terms and publish the matrix on their Website. The SFP annually verifies congruence and veracity of reports for each indicator contained in the matrix (Article 13, DOF, 30 March 2007).

Thus, it has been established that CONEVAL regulates and coordinates the assessment of policies, programmes and actions executed by public agencies (see Annex N). Since 2007, this agency issues and publishes the *Annual Assessment Programme* [PAE], which sets the calendar for performing budget programmes determining the types

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119 The operating rules work as a mechanism for the House of Representatives to decide whether to continue funding the programme or not.

120 The federal government is also responsible for: 1) Planning and coordinating national and regional social development plans; 2) Establishing the National Social Development Programme; 3) Assessing the National Social Development Policy and informing society of actions taken in relation to social development; 4) Promoting social development programmes with the intervention of respective state governments and participation of municipalities in their design and execution; (Article 43, sections I, II, VII, and X, DOF, 20 January 2004). The objective of the 2007-2012 Social Development Sector Programme is to contribute toward sustainable human development through the development of basic capabilities in education, health and nutrition that allow access that is more equitable and betterment opportunities for the poverty-stricken population (SEDESOL, 2008).
of evaluations\textsuperscript{121} used for budget programmes, and dictates which federal programmes must be assessed, with a list of beneficiaries\textsuperscript{8d}.

CONEVAL, SFP and SHCP are responsible for the assessment of federal education programmes, in addition, inside the SEP, agencies, the Unit Responsible for the Programme [UR], the UPEPE\textsuperscript{122}, and DGEP\textsuperscript{123}. The SEP and the states, without modifying their structure, design an UR unconnected to the operation of federal programmes to be coordinated with the CONEVAL, within its purview, for developing every stage of the assessment process: project definition, hiring, supervising and assessment following up (Article 29, DOF, 30 March 2007). The unit responsible for operating the Programme covers assessments costs and the external unit supervises assessments. Only the Performance-Specific Assessment is paid for by CONEVAL and supervision is done jointly with the external UR. The Impact Assessment requires the application of a feasibility script, submission of methodology and reference terms to CONEVAL for its opinion and authorization. External assessors hired must comply with the requirements set forth in the General Guidelines (Article 32, DOF, 30 March 2007).

Programmes that have undergone assessment more than once become part of the Information System for Monitoring Federal Programmes susceptible to assessment [SISEPF] of the UPEPE. These programmes enable the capture and systematisation of relevant information of federal programmes under the SEP and its Coordinated Sector, with emphasis on the one that has to do with programme assessment, attention to recommendations, and the MIR. In addition, it signifies input for following up on the progress and verification of compliance with regulations in force for federal programme assessment of the SEP and its Coordinated Sector; and function as a support tool for the decision-making of the leader of the UPEPE in this matter (SEP-UPEPE, 2010\textsuperscript{c}).

In 2010, there are 112 federal programmes in force, of the modalities assessed, operated by the different under-secretariats and administrative units of the SEP. These programmes are divided in four administrative categories: 28 “S” programmes subject to operating rules; 37 “E” programmes for public services; 2 “B” programmes pertaining to public assets; and 45 “U” programmes for other subsidies. In terms of education services, individuals, legal corporations and educational institutions can participate in more than one programme depending upon its characteristics and target population. Programmes with an assigned budget —“S”, “E” and “U”— must be assessed at least once a year (Article 1, section VIII, DOF, 20 January 2004). The 2010 PAE established that of the 112 programmes of the educational sector and social development, 35 are subject to assessment, particularly the Performance-Specific assessment. As for the rest, 55 are assessed using a strategy approved by CONEVAL, coordinated and paid for by UPEPE, and 22 do not undergo any type of assessment – be it because they lack budget allocation, are not operational and only have creation mandate, or have a budget but have not been implemented.

The SEB operates 24 of the 112 programmes: 12 “S” programmes, 3 “E” programmes, 1 “B” programme, and 8 “U” programmes. The UR of these programmes are: the SEB directly (1 programme), the DGDGIE (8), the DGME (7), the DGDC (3), the DGEI (3) and the DGFCMS (2). In 2010, of these programmes, CONEVAL decided to assess 11 “S” programmes with operational rules\textsuperscript{125} (CONEVAL, 2010\textsuperscript{c}). These programmes respond to four fundamental objectives: a) further teaching and learning processes through the incorporation of educational material and new technological resources to classrooms, such as the National Reading Programme; b) foster enhancement of education quality through efforts focusing on school human resources, such as the Pedagogical Technical Advisor Programme for indigenous education and the PSNFCM; c) seek education improvement through strategies combining different resources emphasising institutional management and innovation, such as the PEC; and d) focus on vulnerable groups such as the Pre-primary and Primary Education Programme for the Children of Migrant Farm

\textsuperscript{121} The six types of assessment programmes are: Design\textsuperscript{6d}, Consistency and Results\textsuperscript{6d}, Processes\textsuperscript{6d}, Performance-Specific\textsuperscript{6d}, Complementary\textsuperscript{6d} and Impact\textsuperscript{6d} (CONEVAL, 2010\textsuperscript{c}).

\textsuperscript{122} The following UPEPE divisions take part, Coordination of Strategic Projects, Analysis and Integration of Educational Policy, Directorate of Information Analysis and Educational Policy Studies, and the Office of Programme Information and Evaluation.

\textsuperscript{123} The following DGEP: divisions take part, Coordination of Networking and Investment follow up, Office of Development and Maintenance of the Indicator System, and Head of the Department of Programming and Follow Up.

\textsuperscript{124} They are not forced to conduct an assessment during the fiscal year, the “U” programmes, which constitute projects of specific investment or that do not contemplate directly the delivery of subsidies, goods or services to beneficiaries, or correspond to supporting projects to federal programmes, which will soon disappear, that their execution depends upon surplus revenue or that states participate in their execution, that do not have public resources allotted for the fiscal year, or have been exempted from the MIR registry (CONEVAL, 2010\textsuperscript{c}).

\textsuperscript{125} Programmes assessed in 2010: 1) Quality Schools, 2) Full-Time Schools, 3) Safe School, 4) Strengthening of Special Education and Educational Integration, 5) National Reading Programme, 6) Strengthening of the Televised Distance Learning Education Service, 7) Digital skills for all; 8) Pre-primary and Primary Education Programme for the Children of Migrant Farm Workers; 9) Basic Education Scholarships for Young Mothers and Pregnant Teens; 10) Pedagogical Technical Advisor Programme, 11) National System of Continuous Training and Professional Betterment of Basic Education In-service Teachers (CONEVAL, 2010\textsuperscript{c}); with the exception of the Programme for the Strengthening of Learning School Communities.
Report of Basic Education Assessment Practices in Mexico, 2010

Workers (PRONIM). In addition, since 2009, other programmes of recent creation have come to be, which cover different approaches, such as PES and PETC (see Annex O).

Until 2009, only 19 of these programmes were part of the SISEPF. All of them are aligned with the PND 2007-2012 and PROSEFU 2007-2012, so development of these programmes is linked to the education policy implemented by the federal government. Additionally, they have a Website and in general, the most recent ones do not undergo assessment. Of these programmes, 12 have an indicator system, eight have a list of beneficiaries, and all of them must have MIR; however, based on the data provided, its existence is evident only in seven programmes. Performance-Specific is the assessment most frequently carried out and only two programmes — Promotion and development of books and reading and Quality Schools — have undergone impact assessment by foreign IES. External assessors are national agencies from higher education institutions — UAM, National Autonomous University of Mexico (UNAM), UPN—; research institutes or centres — FLACSO, CIDE—; or consulting firms — Cívicus— (see Annex P).

Programme assessment is associated with others about goal progress, budget exercise and attainment of objectives and goals of educational policy. The results are used for improving the operation and means of reporting programme progress, as well as its instruments: MIR, operating rules and indicators. Recommendations are made based on the results, which the responsible parties must heed, and compliance is overseen by the SEP (Article 8, DOF, 30 March 2007).

Overall, final assessment reports consist of an executive report, a full report and a positioning from the SEP. They include the following sections: strengths and opportunities, weaknesses and threats, and recommendations on each of the assessment topics that were analysed. Positioning is provided based on the assessment results and gives recommendations to external assessors. This positioning has been useful for demanding stronger assessor expertise in education. These reports are delivered to the H. Union Congress, House of Representatives and Superior Federation Auditing Body, the SHCP, SFP and CONEVAL. After its delivery, assessor reports and data are published permanently on the Websites of the SEP, UR and programmes (Article 26, DOF, 30 March 2007). Access to assessment reports is public.

The following section describes the PEC assessment.
QUALITY SCHOOLS PROGRAMME [PEC]
The PEC is a federal programme with operating rules and list of beneficiaries\textsuperscript{126}, geared toward basic education public schools at all levels and modalities, and operates nationally in all 32 states. Its objective is to contribute toward the improvement of student school achievement in participating schools, and implement a school management model. The PEC started operating during the 2001-2002 school year, and has given priority to primary schools in disadvantaged urban areas, and as of 2006, to schools with students whose results in the ENLACE test are at the “insufficient” level (DOF, 18 December 2009). In late 2008, it benefitted 39 993 schools in 2 125 municipalities, 7.1 million students, approximately 300 thousand educators, and 29 950 principals (INEE, 2008; SEP, 2007\textsuperscript{5}). The responsible unit has been DGDIGIE from its inception in 2005 (see Annex Q).

The PEC assessment is headed by the SEP and involves different institutions. The programme has been assessed annually with variations. Two types of studies were performed at start up. The first, a qualitative study to analyse the PEC impact on teaching practices and parents' participation level, as well as planning activities and mechanisms in schools\textsuperscript{127}. The second, a quantitative study to analyse changes in school achievement scores based on the National Standardised Tests taken by students of all PEC participating schools until 2002. In 2003, based on those studies, a descriptive diagnostic report highly relevant on a school sample was published, which included in-depth information about teachers' profiles and their pedagogical practices, organisational management and social participation in the schools chosen. A third quantitative assessment was performed in 2001 through 2005 by the CIDE\textsuperscript{128}.

Based on the results of the first two studies, in 2005, Heuristica Educativa submitted a report titled “Changes in schools participating in PEC 2001-2004”, with findings about school achievement changes, its relationship with equality and social efficacy\textsuperscript{129} (Loera, 2005). In 2006, two Impact assessments were carried out by the BIRF, University of Oxford, and Harvard Graduate School of Education, both using strong methodological rigour (CONEVAL, 2008). The first found that the PEC has had a positive impact on the academic achievement indicators of benefitted schools. The schools participating in the programme a second time reduced their student desertion rate by an average of 0.27%. The schools participating for three consecutive years reduced that rate by 0.33% on average. PEC participation showed its stronger impact on schools located in states with a medium Refined Human Development Index (IRDH)\textsuperscript{6} and no impact was registered in student results in states with a low index.

Furthermore, through interviews, it was established that the PEC has fostered better coordination between federal and state governments; organisational learning that is improving the functioning of SEN, and medium coordination among state education systems as it failed to produce a meaningful reduction in school administrative work (Reimers, 2006). The second assessment confirmed that schools that participated for three consecutive years in the programme reduced the desertion, repetition and fail rates (0.24%, 0.24% and 0.31 % respectively).

In 2008, the first Performance-Specific assessment based on the MIR of PEC\textsuperscript{130} by C-230 Consultores S.C. and the Civicus Company in 2009. According to the last report of this type of assessment in 2009, the strengths were that the programme promoted social participation, improved resource allocation focus, and reached the established coverage goal. Additionally, it began follow-up and update processes for the programme. The recommendations said the MIR must improve suitability, relevance and consistency of goal and purpose indicators, study the feasibility of including dropout, repetition and failure rates, as well as indicators of progress made by school

[\textsuperscript{126} According to the General Law for Transparency and Access to Public Government Information, the list of schools benefitted is published in the Programme's Website: http://basica.sep.gob.mx/pec/ (Articles 7 and 12, DOF, 11 June 2002).]

[\textsuperscript{127} The main objective of this assessment was to identify changes that can be attributed to the programme in matters of management, participation and pedagogical practices in schools, as well as providing feedback to decisions associated with the programme, and develop local assessment capabilities, particularly at state level. To this end, multiple qualitative research instruments were used – interviews, questionnaires, focus groups, performance assessment – in a sample of schools registered in the PEC the first year – 476 schools chosen at random at the PEC inception, in 31 states. Originally, this assessment was designed as a panel-type study that would include “a comparison group” from the beginning of the study. However, when the INEE was formed in 2002, there was a change in the criteria for defining the PEC school samples which whose academic performance would be followed up, and monitoring of schools included in the ”comparison group” ceased. This constituted a hitherto unknown experience in longitudinal qualitative assessment that used measurements previous and posterior to the programme's implementation and was characterised for being and intervention and companion during several stages of the school year (SEP, 2003\textsuperscript{5}).]

[\textsuperscript{128} This assessment focused on validating the theoretical framework of the programme, degree of compliance with PEC operating rules, information about the number of schools, resources invested, number of students participating, and a description of structural changes of the national agency operated by the PEC.

[\textsuperscript{129} The Report contains a succinct description of the findings after processing the information gathered for the quantitative assessment of academic achievement results of mathematics and Spanish tests for grades-3 and 5 students enrolled in PEC schools, along with information obtained from surveys to schools belonging to the qualitative study sample.

[\textsuperscript{130} To see the PEC 2010 indicator matrix, please visit http://basica.sep.gob.mx/pec/pdf/maracologico/marcoLogico2010PEC.pdf]
benefitted and continue moving forward with beneficiary surveys on participation and satisfaction to monitor actions outside the control of the programme stewardship (CONEVAL, 20093). Most of the recommendations stemming from these reports have been incorporated.

In 2010, there are plans for the realisation of a feasibility study, a necessary condition for CONEVAL reviewing and authorising a third Impact assessment. At present, there is no qualitative assessment; therefore, for the 2009 SEP positioning, future assessors were asked to perform fieldwork, either randomly or experimentally (SEP, 20106). Essentially, this is because the analysis of problems detected in theory shows they can be solved by doing fieldwork and seeks to document positive externalities generated by PEC (Reimers, 2006; SEP-UPEPE, 20106). Some challenges for the PEC involve defining a suitable contrafactual7 and considering it takes years of participation in the programme to see significant improvement in education results. This is particularly true in certain states in which Secretariats of Education have less institutional capacity. For this reason, future PEC assessments must consider a time horizon of last three years (Reimers, 2006).

PROGRAMME ASSESSMENT CHALLENGES

In Mexico, assessment of basic education programmes is a developing field that has grown significantly in the last decade. In this sense, of note are the guidelines and systematisation of the PAE assessment methodology, participation of different agencies and publication of assessment results to the public at large, which are consistent with advances made in the assessment of other SEN components. The challenges focus on analysing the suitability of current programme opening, breadth of institutional assessments in terms of their connection with large educational policy objectives, measuring its impact on beneficiaries, and aptness of an assessment of the current programme assessment (AEM09; AEP07).

Regarding those challenges, first, educational sector programmers are assessed as social development programmes, which although contributing to social wellbeing there are differences and complexities in the sector that should be known. CONEVAL has regulatory powers over all federal government sectors, including education; therefore, specific rules by sector are necessary.

In 2009, for the performance-specific assessments, the SEP asked assessors to speak with the head of the programme before submitting their report; hence, reports that are more accurate were issued in relation to educational sector programmes. However, it is necessary to promote external assessments that transcend the analysis of management goal attainment and assess the programmes’ performance taking into consideration the education sector’s complexities. In addition, it is necessary to encourage assessments that consider field strategies, such as that of the indicators, processes or qualitative and wider use of results of academic achievement from Excale and ENLACE (SEP-UPEPE, 20106; AEM09) with the aim of providing significant elements for programme enhancement.

Second, not all programme modalities have operating rules; there are programmes devoid of operating rules with bigger budgets. For this reason, the idea is to standardise the other programme modalities without operating rules to arrive at compulsory and general compliance criteria that would make it possible to remove discretion from resource allocation. It requires then, better communication by the educational sector with the CONEVAL so greater attention is paid to programmes devoid of operating rules, but essential to the sector (AEF05; AEM09).

Lastly, several improvement programmes have significant deficiencies in terms of planning, implementation, coordination and assessment that threaten their efficiency. An overview allows appreciation of the scopes and limitations of these efforts so assessment of the programmes' impact on education quality is necessary. It is important to continue making progress in Impact assessments taking into consideration the complexity of the methodologies required to do so, as well as greater forethought in programme design to set off proper inquiry processes, such as the preparation of a baseline. In addition, when multiple new actions are implemented in schools in a parallel fashion, it becomes more difficult to discern the effects of each one on school management or learning.

In this sense, the implementation of recently created and future programmes must be accompanied by an Impact assessment to determine whether it is pertinent to increase their coverage and resource allotment for them to achieve their objectives (INEE, 2008; AEF05; AEM09). The INEE can have the power to evaluate programme quality based on their content rather than administratively or procedurally alone (AEM09; UNF02).
REFERENCES


National Institute for Education Assessment and Evaluation [INEE]. (2010). INEE gathered this information from questionnaires applied for this report.

Report of Basic Education Assessment Practices in Mexico, 2010


Official Federation Gazette [DOF]. (1982a, 7 December). *Agreement number 96, which establishes the organisation and functioning of primary schools*. Secretariat of Public Education. Available at: http://www.sep.gob.mx/work/appsite/dgajuridicos/10ac96.htm


Official Federation Gazette [DOF]. (2000, 30 October). *Agreement number 286, which establishes the determining guidelines for general standards and criteria for the transfer of credits studied abroad and equivalency, as well as procedures by which education acquired autodidactically, through work experience or from work-
based certification will be credited. Secretariat of Public Education. Available at: http://www.sep.gob.mx/work/models/sep1/Resource/103825/1/Ac286.pdf


Official Federation Gazette [DOF]. (2009, 7 September). Agreement number 494, which updates agreement number 181 which sets forth Study Plan and Programmes for Primary Education. Secretariat of Public Education. Available at: http://www.sep.gob.mx/
Report of Basic Education Assessment Practices in Mexico, 2010

Education. Available at: http://201.117.193.130/seerslp/TRANSPARENCIA/Acuerdo%20Secretarial%20494.pdf


Organisation for Economic Co-operation and Development [OEC]. (2009a). Creating effective teaching and learning environments: first results from TALIS. Available at: http://www.oecd.org/document/54/0,3343,en_2649_39263231_42980662_1_1_1_1,00.html


Report of Basic Education Assessment Practices in Mexico, 2010


Secretariat of Public Education [SEP], Directorate General for Planning and Programming [DGPP]. (2010). DGPP provided this information gathered from questionnaires applied to different SEP areas for this report.

Secretariat of Public Education [SEP], Directorate General for the Development of Education Management and Innovation [DGDGIE]. (2010). DGDGIE provided this information gathered from questionnaires applied to different SEP areas for this report.


Secretariat of Public Education [SEP], Directorate General of Accreditation, Incorporation and Revalidation [DGAIR]. (2010). DGAIR provided this information gathered from questionnaires applied to different SEP areas for this report.


Secretariat of Public Education [SEP], Directorate General of Continuous Training for In-Service Teachers [DGFCCMS]. (2010). DGFCCMS provided this information gathered from questionnaires applied to different SEP areas for this report.

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Report of Basic Education Assessment Practices in Mexico, 2010

Secretariat of Public Education [SEP], Directorate General of Curriculum Development [DGDC]. (2010). DGDC provided this information gathered from questionnaires applied to different SEP areas for this report.

Secretariat of Public Education [SEP], Directorate General of Educational Materials [DGME]. (2010). DGME provided this information gathered from questionnaires applied to different SEP areas for this report.

Secretariat of Public Education [SEP], Directorate General of Indigenous Education [DGEI]. (2010). DGEI provided this information gathered from questionnaires applied to different SEP areas for this report.

Secretariat of Public Education [SEP], Directorate General of Policy Assessment [DGEP]. (2010). Information DGEP provided this information gathered from questionnaires applied to different SEP areas for this report.

Secretariat of Public Education [SEP], Directorate General of Tertiary Education for Education Professionals [DGESPE]. (2010). DGESPE provided this information gathered from questionnaires applied to different SEP areas for this report.

Secretariat of Public Education [SEP], National Coordination of the Teaching Career [CNCM]. (2010). CNCM provided this information gathered from questionnaires applied to different SEP areas for this report.


Secretariat of Public Education [SEP], Educational Policy Planning and Assessment Unit [UPEPE]. (2008). Evaluación del desempeño de los alumnos. Mexico: SEP (Internal PowerPoint presentation)


Secretariat of Public Education [SEP], Educational Policy Planning and Assessment Unit [UPEPE]. (2009). Cédulas de Evaluación de cada Programa que arroja el Sistema de Información para el Seguimiento de Programas Federales susceptibles de ser evaluados [SISEPF]. Mexico: SEP, Educational Policy Planning and Assessment Unit [UPEPE].

Secretariat of Public Education [SEP], Educational Policy Planning and Assessment Unit [UPEPE]. (2010). UPEPE provided this information gathered from questionnaires applied to different SEP areas for this report.


Report of Basic Education Assessment Practices in Mexico, 2010

http://www.comipems.org.mx/autoevaluacion/Autoevaluacion/Descargas/AutoevalMNCT/QUE_TAN_BU

ENA_ES_NUESTRA_ESCAPELA.pdf


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INTERVIEWS WITH KEY PEOPLE

Interviews conducted with key actors in education and basic-type educational assessment in Mexico: Educational Authorities [AE], Representatives of the Professors [RP], Faculty Members [UN] and Representatives of Civil Society [SC]. The codes used to cite them throughout the report and maintain confidentiality were the following:

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WEBSITES RECOMMENDED IN THIS REPORT

http://alianza.sep.gob.mx
http://basica.sep.gob.mx/dgdgie
http://basica.sep.gob.mx/dgdgie/cva/sitio/pdf/evaluacionesextra/PEC/ejecutivoPEC.pdf
http://basica.sep.gob.mx/dgdgie/cva/sitio/start.php?ac
http://basica.sep.gob.mx/escuelasiempreabierta/
http://basica.sep.gob.mx/pec/
http://basica.sep.gob.mx/dgei/start.php
http://basica.sep.gob.mx/tiempocompleto/
http://basico.sep.gob.mx/reformaintegral/
http://dgfcms.sep.gob.mx:7037/PrioryRetEdB/Materiales/FollInf0910/follInf0910.htm
http://formacioncontinua.sep.gob.mx/
http://formacioncontinua.sep.gob.mx/index.php?option=com_content&view=article&id=51&Itemid=76
http://guiaegel.com
http://lectura.dgme.sep.gob.mx
http://ses4.sep.gob.mx/index.jsp
http://siese.basica.sep.gob.mx
http://sig.jalisco.gob.mx/evaluacion/
http://telesecundaria.dgme.sep.gob.mx/
http://www.alianzaconcursonalizacionaliz.org
http://www.ceneval.gob.mx
http://www.ceneval.gob.mx
http://www.cenni.sep.gob.mx
http://www.cide.mx/
http://www.concursonalizacionaliz.org
http://www.coneval.gob.mx
http://www.dgep.sep.gob.mx
http://www.dgep.sep.gob.mx/BROW-AES/indice_Idanis_habilidad.htm
http://www.dgespe.sep.gob.mx/planes
http://www.edomex.gob.mx/educacion
http://www.edomex.gob.mx/evaluacioneducativa/index.htm
http://www.educacionespecial.sep.gob.mx
http://www.enciclomedia.edu.mx
http://www.ieees.gob.mx/
http://www.ilce.edu.mx/
http://www.inea.gob.mx
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http://www.inee.edu.mx/explorador/
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http://www.jalisco.gob.mx/wps/portal/sriaEducacion
http://lectura.dgme.sep.gob.mx/
http://www.nl.gob.mx/?P=sec_educacion
http://www.nl.gob.mx/?P=ideeleon
http://www.promajoven.sep.gob.mx
http://www.reformaprescolar.sep.gob.mx
http://www.secolima.gob.mx/
http://www.seczac.gob.mx/
http://www.seg.guanajuato.gob.mx/
Report of Basic Education Assessment Practices in Mexico, 2010

http://www.sems.gob.mx/aspnv/homesems.asp
http://www.sep.gob.mx/wh/sep1/sep1_Organigrama_SEP2
http://www.sep.mx/work/sites/sep1/resources/LocalContent/129130/1/normasbasica20092010.pdf
http://www.sepc.gob.mx/
http://www.seyc.gob.mx/
http://www.snie.sep.gob.mx/SNIESC/
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### Acronyms of Institutions, Programmes and Terms

<table>
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<th>Acronym</th>
<th>Description</th>
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<td>ACE</td>
<td>Alliance for the Quality of Education (Acuerdo para la Calidad de la Educación)</td>
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<tr>
<td>ACREDITA-SEC</td>
<td>Test for Accreditation of Knowledge Equivalent to Lower Secondary Education (Examen para la Acreditación de Conocimientos Equivalentes a la Educación Secundaria)</td>
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<tr>
<td>AEE</td>
<td>State Assessment Areas (Áreas Estatales de Evaluación)</td>
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<td>ANMEB</td>
<td>National Agreement for the Modernisation of Basic Education (Acuerdo Nacional para la Modernización de la Educación Básica)</td>
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<td>ANTAD</td>
<td>National Association of Self-Service and Department Stores (Asociación Nacional de Tiendas de Autoservicio y Departamentales)</td>
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<td>ATP</td>
<td>Pedagogical Technical Advisor (Asesor Técnico Pedagógico)</td>
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<tr>
<td>BID</td>
<td>Inter-American Development Bank (Banco Interamericano de Desarrollo)</td>
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<tr>
<td>BIRF</td>
<td>International Bank for Reconstruction and Development of the World Bank (Banco Internacional de Reconstrucción y Fomento, del Banco Mundial)</td>
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<tr>
<td>CAM</td>
<td>Multi-service Centres (Centros de Atención Múltiple)</td>
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<td>CAPEP</td>
<td>Pre-primary Education Psycho-pedagogical Centre (Centro de Atención Psicopedagógica de Educación Preescolar)</td>
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<td>CCT</td>
<td>Work Centre Catalogue (Catálogo de Centros de Trabajo)</td>
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<td>CEE</td>
<td>Centre for Educational Studies (Centro de Estudios Educativos)</td>
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<td>CEFAA</td>
<td>Chart of Factors Associated with Learning (Cédula de Factores Asociados al Aprendizaje)</td>
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<td>Child Development Centre (Centro de Desarrollo Infantil)</td>
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<td>Technological Studies Centre (Centro de Estudios Tecnológicos)</td>
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<td>Centre for Research and Teaching of Economics (Centro de Investigación y Docencia Económicas, A.C.)</td>
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<td>Centre for Research and Higher Studies in Social Anthropology (Centro de Investigaciones y Estudios Superiores en Antropología Social)</td>
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<td>CNCM</td>
<td>National Coordination of the Teaching Career (Coordinación Nacional de Carrera Magisterial)</td>
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<td>National Coordination of Private Schools (Confederación Nacional de Escuelas Particulares)</td>
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<td>COE</td>
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<td>COMIE</td>
<td>Mexican Council for Education Research (Consejo Mexicano de Investigación Educativa, A.C.)</td>
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<td>COMPYE</td>
<td>Competition Test for Admission to Higher Education in the Mexico City Metropolitan Area (Examen para el Concurso de Ingreso a la Educación Media Superior en la Zona Metropolitana de la Ciudad de México)</td>
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<td>CONACyT</td>
<td>Planning and Evaluating Commission (Comisión de Planeación y Evaluación)</td>
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<td>National Council for the Evaluation of Social Development Policy (Consejo Nacional de Evaluación de la Política de Desarrollo Social)</td>
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<td>CPEUM</td>
<td>Political Constitution of the United Mexican States (Constitución Política de los Estados Unidos Mexicanos)</td>
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Estados Unidos Mexicanos

CREM
Normal Education Regional Centres (Centros Regionales de Educación Normal)

CTEIE
Specialized Technical Committee for Education Information, INEGI (Comité Técnico Especializado de Información Educativa, INEGI)

DEE
INEE Directorate of School Assessment (Dirección de Evaluación de Escuelas del INEE)

DGAIR
Directorate General of Accreditation, Incorporation and Revalidation (Dirección General de Acreditación, Incorporación y Revalidación)

DGDC
Directorate General of Curricular Development (Dirección General de Desarrollo Curricular)

DGDGIE
Directorate General for the Development of Education Management and Innovation (Dirección General de Desarrollo de la Gestión e Innovación Educativa)

DGE
Directorate General of Assessment (Dirección General de Evaluación)

DGEI
Directorate General of Indigenous Education (Dirección General de Educación Indígena)

DGEP
Directorate General of Policy Assessment (Dirección General de Evaluación de Políticas)

DGESPE
Directorate General of Tertiary Education for Education Professionals (Dirección General de Educación Superior para Profesionales de la Educación)

DGFCMS
Directorate General of Continuous Training for In-Service Teachers (Dirección General de Formación Continua de Maestros en Servicio)

DGME
Directorate General of Educational Materials (Dirección General de Materiales Educativos)

DGPP
Directorate General for Planning and Programming (Dirección General de Planeación y Programación)

DGPPP
Directorate General of Planning, Programming and Budgeting (Dirección General de Planeación, Programación y Presupuesto)

DIE-IPN
IPN Department of Education Research (Departamento de Investigación Educativa del IPN)

DIE-INEE
INEE Directorate of Educational Indicators (Dirección de Indicadores Educativos del INEE)

DIF
National System for Comprehensive Family Development (Sistema Nacional para el Desarrollo Integral de la Familia)

DOF
Official Gazette of the Federation (Diario Oficial de la Federación)

EBSEN
Basic Statistics of the National Education System (Estadística Básica del Sistema Educativo Nacional)

ECES
Census Evaluation of Lower Secondary Education (Evaluación Censal a la Educación Secundaria)

EGEL
General Examinations for Bachelor's Degree Graduation (Exámenes Generales de Egreso de la Licenciatura)

EGRES
Lower Secondary School Graduation Exam (Examen de Egreso de la Secundaria)

EHBEN
Assessment of Basic Skills in Normal Education (Evaluación de Habilidades Básicas en la Educación Normal)

EIEN
Normal Education Entrance Exam (Examen de Ingreso a la Educación Normal)

ENAMS
National Continuous Training Exams for In-service Teachers (Exámenes Nacionales de Actualización para Maestros en Servicio)

ENCHD
National Exam of Teaching Knowledge and Skills (Examen Nacional de Conocimientos y Habilidades Docentes)

ENLACE
National Assessment of Academic Achievement in Schools (Evaluación Nacional del Logro Académico en Centros Escolares)

EV
Vertical Promotion System (Sistema de Escalafón Vertical)

EVEDEMS
Statewide Assessment of Upper Secondary Education (Evaluación Estatal de Educación Media Superior)

EVEDEPS
Statewide Academic Performance Assessment in Primary and Lower Secondary Schools (Evaluación Estatal del Desempeño Escolar en Primaria y Secundaria)

EVEP
Primary Education Assessment Programme (Programa de Evaluación de la...
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EXANI-I
National Upper Secondary Education Entrance Exam (Examen Nacional de Ingreso a la Educación Media Superior)

Excale
Educational Quality and Achievement Tests (Exámenes de la Calidad y el Logro Educativos)

FAEB
Contribution Fund for Basic and Normal Education (Fondo de Aportaciones para la Educación Básica y Normal)

FASA
Factors Associated with Lower Secondary School Learning (Factores Asociados al Aprendizaje en Secundaria)

FLACSO
Latin American School of Social Sciences (Facultad Latinoamericana de Ciencias Sociales)

GTEE
Working Group on Standards and Assessments (Grupo de Trabajo sobre Estándar Evaluación)

GTRRR
Working Group of State Coordinators Responsible for Job Competition (Grupo de Trabajo de Coordinadores Estatales responsables del Concurso de Plazas)

IDANIS
Instrument for Testing New Lower Secondary School Students (Instrumento para el Diagnóstico de Alumnos de Nuevo Ingreso a Secundaria)

IDCIEN
Diagnosis and Classification Instrument for Normal School Enrolment (Instrumento de Diagnóstico y Clasificación para el Ingreso a la Educación Normal)

IEA
International Association for the Evaluation of Educational Achievement

IES
Higher Education Institutions (Instituciones de Educación Superior)

IIIDE
Institute of Educational Research and Development (Instituto de Investigación y Desarrollo Educativo)

ILCE
Latin American Institute for Educational Communication (Instituto Latinoamericano de la Comunicación Educativa)

INEA
National Institute for Adult Education (Instituto Nacional para la Educación de los Adultos)

INNE
National Institute for Education Assessment and Evaluation (Instituto Nacional para la Evaluación de la Educación)

INEGI
National Statistics, Geography and Informatics Institute (Instituto Nacional de Estadística y Geografía)

IPN
National Polytechnic Institute (Instituto Politécnico Nacional)

IRDH
Refined Human Development Index (Índice Refinado de Desarrollo Humano)

LGDS
General Law on Social Development (Ley General de Desarrollo Social)

LGE
General Education Law (Ley General de Educación)

LP
Planning Law (Ley de Planeación)

LLECE
Latin American Laboratory for Assessment of the Quality of Education (Laboratorio Latinoamericano de Evaluación de la Calidad Educativa)

MIFAE
Modules for Comprehensive Specific Academic Reinforcement (Módulos Integrales de Fortalecimiento Académico Específico)

MIR
Results Indicator Matrix (Matriz de indicadores de resultados)

NOM
Official Mexican Standards (Norma Oficial Mexicana)

OECD
Organisation for Economic Co-operation and Development

OCI
Children's Knowledge Olympics (Olimpiada del Conocimiento Infantil)

ODES
State Government decentralized Agencies (Organismos Descentralizados de los Gobiernos Estatales)

OECD
Organisation for Economic Co-operation and Development

OEIF
Independent Federalist Evaluation Unit (Órgano de Evaluación Independiente con carácter Federalista)

OREALC
Regional Bureau for Education in Latin America and the Caribbean

OSFAE
Office of Federal Services for Education (Oficina de Servicios Federales de Atención a la Educación)

PAE
Annual Assessment Programme (Programa Anual de Evaluación)

PARE
Programme to Reduce Educational Lag (Programa para Abatir el Rezago Educativo)
PAREB  Programme to Reduce Lag in Basic Education (Programa para Abatir el Rezago en la Educación Básica)

PAREIB  Programme to Reduce Lag in Early Childhood and Basic Education (Programa para Abatir el Rezago en Educación Inicial y Básica)

PAT  Annual Work Plan (Plan Anual de Trabajo)

PEAL  High Achievement School Profiles, Baja California (Perfiles de Escuelas de Altos Logros, Baja California)

PEC  Quality Schools Programme (Programa Escuelas de Calidad)

PEM  Multi-grade Education Proposal (Propuesta Educativa Multigrado)

PEP  Pre-primary Education Programme (Programa de Educación Preescolar)

PES  Safe School Programme (Programa Escuela Segura)

PETC  Full-time School Programme (Programa Escuelas de Tiempo Completo)

PETE  Strategic School Transformation Plan (Plan Estratégico de Transformación Escolar)

PGEA  General Learning Assessment Plan, INEE (Plan General de Evaluación del Aprendizaje, INEE)

PIARE  Comprehensive Program to Reduce Education Lag (Programa Integral para Abatir el Rezago Educativo)

PIB  Gross Internal Product (Producto Interno Bruto)

PISA  Programme for International Student Assessment

PNCM  National Teaching Career Programme (Programa Nacional de Carrera Magisterial)

PND  National Development Plan (Plan Nacional de Desarrollo)

PREXANI  EXANI-I Forecast Test (Examen Pronóstico del EXANI-I)

PRODEI  Early Childhood Education Development Project (Proyecto para el Desarrollo de la Educación Inicial)

PRODET  Detailed Programming (Programación Detallada)

PRONAP  National Programme for the Continuous Training of Basic Education In-service Teachers (Programa Nacional para la Actualización Permanente de los Maestros de Educación Básica en Servicio)

PRONIM  Pre-primary and Primary Education Programme for the Children of Migrant Farm Workers (Programa de Educación preescolar y primaria para niñas y niños de familias jornaleras agrícolas migrantes)

PROSEDU  Education Sector Programme (Programa Sectorial de Educación)

PSNFCM  National System of Continuous Training and Professional Betterment of Basic Education In-service Teachers (Programa del Sistema Nacional de Formación Continua y Superación Profesional de Maestros de Educación Básica en Servicio)

PTF  Programme for the Academic Transformation and Strengthening of Normal Schools (Programa para la Transformación y el Fortalecimiento Académicos de las Escuelas Normales)

RAND  Research and Development Corporation

RENAME  National Student, Teacher and School Registry (Registro Nacional de Alumnos, Maestros y Escuelas)

RES  Lower secondary Education Reform (Reforma de la Educación Secundaria)

RIEB  Comprehensive Reform of Basic Education (Reforma Integral de la Educación Básica)

RIEMS  Comprehensive Reform of Upper Secondary Education (Reforma Integral de la Educación Media Superior)

SEB  Undersecretariat of Basic Education (Subsecretaría de Educación Básica)

SED  Performance Assessment System (Sistema de Evaluación del Desempeño)

SEDESOL  Secretariat of Social Development (Secretaría de Desarrollo Social)

SEN/NES  National Education System/ Mexican Education System (Sistema Educativo Nacional/ Sistema Educativo Mexicano)

SEP  Secretariat of Public Education (Secretaría de Educación Pública)

SERC  Second Regional Comparative and Explanatory Study (Segundo Estudio Regional Comparativo y Explicativo)
SES    Undersecretariat of Tertiary Education (Subsecretaría de Educación Superior)
SFP    Secretariat of Civil Service (Secretaría de la Función Pública)
SHCP   Ministry of Finance and Public Credit (Secretaría de Hacienda y Crédito Público)
SIE    Education Indicator System (Sistema de Indicadores Educativos)
SIEI   Indigenous Education Information System (Sistema de Información de Educación Indígena)
SHPP-G Master List of Government Programmes (Sistema Integral de Padrones de Programas Gubernamentales)
SILE   Education Achievement Indicator System, Baja California (Sistema de Indicadores sobre el Logro Educativo, Baja California)
SININDE National Education Indicator System (Sistema Nacional de Indicadores Educativos)
SISEPF Information System for Monitoring Federal Programmes susceptible to assessment (Sistema de Información para el Seguimiento de Programas Federales susceptibles de ser evaluados)
SIEEB  Statistical Information System of Basic Education (Sistema de Información de Estadística de la Educación Básica)
SISTESEP Systems for Education Statistics Analysis (Sistemas para el análisis de la Estadística Educativa)
SNAEEB National Accreditation System for Basic Education Schools (Sistema Nacional de Acreditación de Centros Escolares de Educación Básica)
SNDS   National Social Development System (Sistema Nacional de Desarrollo Social)
SNEE   National System for Education Assessment (Sistema Nacional de Evaluación Educativa)
SNIE   National Education Information System (Sistema Nacional de Información Educativa)
SNTE   National Teachers Union (Sindicato Nacional de los Trabajadores de la Educación)
SPC    Professional Career Service (Servicio Profesional de Carrera)
TALIS  Teaching and Learning International Survey
TIMSS  Trends in International Mathematics and Science Survey
TLC    North American Free Trade Agreement (Tratado de Libre Comercio de América del Norte)
UABC   Autonomous University of Baja California (Universidad Autónoma de Baja California)
UAM    Metropolitan Autonomous University (Universidad Autónoma Metropolitana)
UCE    State Coordinating Units (Unidades Coordinadoras Estatales)
UIA    Ibero-American University (Universidad Iberoamericana)
UNAM   National Autonomous University of Mexico (Universidad Nacional Autónoma de México)
UNESCO United Nations Educational, Scientific and Cultural Organization
UNETE  Union of Entrepreneurs for Educational Technology (Unión de Empresarios para la Tecnología en la Educación)
UPC    Compensatory Programme Unit (Unidad de Programas Compensatorios)
UPEPE  Educational Policy Planning and Assessment Unit (Unidad de Planeación y Evaluación de Políticas Educativas)
UPN    National Pedagogical University (Universidad Pedagógica Nacional)
UR     Unit Responsible for the Programme (Unidad Responsable del Programa)
USAER  Support Service Units for Regular Education (Unidades de Servicios de Apoyo a la Educación Regular)
GLOSSARY

**Academic performance**  See Student performance.

**Accountability**  Responsibility assumed by people who implement a process or procedure to justify decisions made and results obtained (Wheeler et al., 1992).

**Administrative funding**  Subordination of a school establishment in relation to the agency its operation depends on financially and administratively (SEP, 2009c).

**Administrative staff with a group**  Educator with administrative and executive functions in schools, institutes or educational centres that also teaches classes to one or more groups of students (SEP, 2009c).

**Adult education**  Educational service provided by the NES that includes literacy, primary, lower secondary education and job training for people 15 years of age and older, mainly through open and distance learning (SEP, 2009c). This type of education is offered by the National Institute for Adult Education [INEA] through reading and writing courses, primary and lower-secondary education, as well as job training.

**Assessment**  Information-gathering process on a student or group of students to provide feedback for decisions regarding their progress or development (JCSEE, 2003). Note: The term in English was used in this instance because it is difficult to provide an accurate translation in Spanish.

**Assessment of programme consistency and results**  Assessment, through systematic theoretical work, of the overall performance of federal programmes for improving their management and measuring results based on an indicator matrix (CONEVAL, 2010b).

**Assessment of programme design**  Assessment, through systematic and theoretical work, of the programme’s design based on MIR congruence; that is, it verifies its horizontal and vertical logic as well as relevance and suitability of indicators, and other components, assumptions and verification means among them. This assessment is conducted on programmes that are in their first year of operation in the corresponding fiscal year or have undergone substantial changes (CONEVAL, 2010b).

**Assessment of programme impact**  Assessment to identify, using rigorous methodology, index changes at the level of results attributable to a federal programme (CONEVAL, 2010b).

**Assessment of programme processes**  Assessment performed using fieldwork to determine whether the programme is carrying out its operational processes effectively and efficiently and whether it contributes to improving management (CONEVAL, 2010b).

**Assessment recommendations**  Proposals whose aim is to enhance, strengthen or perfect the subject evaluated (Wheeler et al., 1992).

**Average Education Level**  Educational index expressing the average number of school grades completed by the population 15 years of age or older. It is the instruction level of a country. Based on the information provided by the AEL, any country can assess their population's educational level. It is the figure whose numerator is formed by the product of the sum of the population 15
years old and over (classified by the number of grades completed) multiplied by the number of grades completed whose denominator is the population 15 years old and over (SEP, 2009c).

B

Bachelor's degree Tertiary education that trains for the practice of a profession and whose compulsory antecedent is upper secondary education or its equivalent (SEP, 2009c).

Basic Education Education type implying a systematic training process encompassing pre-primary instruction, during which some knowledge and habit-formation are taught; primary instruction during which scientific knowledge and social disciplines begin, and lastly, lower-secondary education in which scientific knowledge is expanded through observation, research and practice (SEP, 2009c). Preschool, primary, and secondary education through grade 9 constitute basic education.

Budget programme Set of activities that include planning, programming, budgeting, exercise, control, monitoring, evaluation and accountability of federal spending according to the schedule of activities of the Law for programs pertaining to government functions and social or economic development as specified in the Federation's Expenditure Budget for every fiscal year (CONEVAL, 2010b).

C

Challenges The Challenges section in every chapter of the report is based on testimonies, opinions and proposals in relation to NES assessment components addressed in this report. They were obtained from interviews with key actors in matters of education and educational assessment in Mexico as well as from questionnaires completed and delivered by participating agencies. The challenges presented in this report do not represent all of the information received through both information-gathering methods but are those that appeared consistently and reiteratively as well as clearly, precisely and concisely in both interviews and questionnaires.

Community pre-primary education Pre-primary education service offered in stable mestizo locations with less than 29 children. This programme's activities stem from daily life experiences and require the child's active participation; the aim is to gauge their feelings, knowledge and capabilities in a comprehensive manner. The pre-primary instructor encourages children to express their opinions, desires and experiences through group discussions and observes the students' motivations. All of it helps the instructor propose a daily topic to his/her students, which becomes the starting point for the programme's didactic sequences (SEP, 2009c).

Complementary programme assessment Optional assessment, according to the programme's needs and interests; the purpose is to improve management and gather additional information on the programme's performance (CONEVAL, 2010b).

Constructed-response test component Test item composed of a sentence that states a problem, statement or question and asks the examinee to develop an answer (Lyman, 1998; Osterlind, 1989).

Contrafactual A programme that is similar in terms of certain variables of interest to a
target programme to be assessed. It functions as a control group for the assessment process.

**Coverage**

Indicator that shows the attention universe in which it is applied. There are two types of coverage for assessment purposes: national and central (SEP, 2009c).

**Criterial Test or criterion-referenced test**

Measuring instrument that interprets results by comparing the examinee's performance with the specific proficiency area.

**Criterion-based assessment**

Type of assessment in which the performance or results obtained by a student are compared with his or her own results at other times, evaluating progress toward a proposed objective and the distance separating the student from it in relation to a pre-set criterion (DOF, 7 September 2009).

**Curriculum**

Content organised in terms of a particular teaching concept that includes didactic guidelines or suggestions and evaluation criteria with the aim of fostering student development and learning. To this end, the curriculum must be congruent with developmental and learning processes of children and adolescents, suitable to students' educational needs, relevant to social needs and demands. In curriculum preparation, programme proposals for each level, modality and grade must be properly coordinated with preceding and succeeding levels (DOF, 7 September 2009).

**Diagnostic evaluation**

Evaluation that identifies knowledge acquired and areas of improvement in student learning. The intention is to determine previous knowledge of students at the beginning of a didactic sequence and help educators and students know the students' level of knowledge (Gronlund, 1998; SEP-DGME, 2010).

**Distance learning**

Process through which abilities, skills and knowledge are acquired as a result of experience, training or observation.

**Doctorate**

Postgraduate educational service with the highest level of professional training at the NES (SEP, 2009c).

**Dropout/ desertion rate**

Educational indicator expressing the number or percentage of students who abandon school activities before completing a grade or level. Desertion has three classifications: intra-curricular, inter-curricular and complete desertion. Abandonment during the school year is called intra-curricular desertion. Lastly, complete desertion is a combination of both dropout rates. (SEP, 2009c).

**Early childhood education**

Educational service provided by the SEN for children 45 days old to 5 years and eleven months of age for fostering their integral physical, emotional, social and cognitive development. Initial education schools also provide mother-child guidance for parents. It is neither compulsory nor a priority (SEP, 2009c).

**Educational assessment**

Structured and reflective process that permits understanding the nature of a
study object and issue value judgements on it, providing information to help enhance and adjust educational actions (Ruiz, 1996).

### Efficiency
To have sufficient human and material resources and utilize them in the best fashion, avoiding wastefulness and misuse (INEE, 2008).

### Efficiency Terminal
Educational indicator that allows to know the number of students who complete a regular educational level (within the time set) and the percentage of students that culminate late. Is the percentage ratio by dividing the number of graduates of a certain educational level, the number of new students who entered first grade this educational level.

### Enrolment
Group of students registered for a school year in an educational institution or school (SEP, 2009c).

### Equity
Takes into account the unequal situation of students and families, the communities in which they live and schools themselves and offers special aid to those who need it so educational objectives are reached by the greatest number possible (INEE, 2008).

### Evaluation
Systematic and methodological process by which information on a particular object is gathered in order to judge its merit or value and make specific decisions (Hopkins, 1998).

### Examinee
A person submitting to an evaluation or assessment process for a specific objective.

### Expected Learning
Essential observable skills students are expected to attain as a result of working on one or more didactic projects and, therefore, constitute a fundamental reference for both planning and assessment (DOF, 7 September 2009).

### External assessment
Assessment made by persons not involved in supporting, developing or operating the object under assessment (JCSEE, 1994).

### Federal funding
A type of administrative control that includes schools financed by the federal government and technically and administratively controlled by the SEP and other Secretariats or federal bodies (SEP, 2009f).

### Federal/autonomous funding
A type of administrative control of institutions with the capacity for self-administration. They usually receive funding from federal and state governments (SEP, 2009f).

### Formative assessment
Type of assessment that: 1) determines whether a student or group of students has acquired the knowledge, skills and/or competencies taught and, 2) identifies success and areas of improvement to guide teaching (Gronlund, 1998). It states that what students know how to do and the manner in which they attain expected learning is closely linked to content studied in each grade (SEP-DGME, 2010).

### General lower secondary
Secondary educational service immediately following primary education
### Report of Basic Education Assessment Practices in Mexico, 2010

**General pre-primary education**
Pre-primary educational service offered to children aged three to five. It is the most generalised pre-primary education service and unlike the others (indigenous and community), schools are staffed by female teachers (SEP, 2009c).

**General primary education**
Primary educational service offered to children aged six to 14. It is provided in urban and rural settings (SEP, 2009c).

**General upper secondary education**
Educational service at upper secondary level that prepares students in all areas of knowledge required in tertiary education; it is preparatory for said studies and completed in two or three years (SEP, 2009c).

**Graduating**
See Graduation Rate.

**Graduation Rate**
Educational index that makes it possible to know the number of students completing an educational level in a regular fashion (within the established time) and percentage of students graduating outside the time allotted. It is the percentage ratio resulting from dividing the number of graduates from a particular educational level by the number of students who enrolled in the first grade of that educational level (SEP, 2009c).

**Gross Domestic Product (GDP)**
Indicator representing the amount of a country’s annual production, which would correspond to each one of its inhabitants if equally divided among them (INEE, 2004).

**Higher education**
Education that trains students in all fields of knowledge. It requires completion of high school or its equivalent. It is comprised of upper technical levels, bachelor's degree and postgraduate studies (SEP, 2009c).

**Higher technician level**
Tertiary education level whose compulsory antecedent is high school or its equivalent; minimum duration is two years and maximum three years; it is not equivalent to a bachelor's degree and it is part of tertiary education programmes. It is also called associate's degree (SEP, 2009c).

**High School College**
Upper secondary education institutions, which prepare students in all areas of knowledge so they can choose a tertiary education field. It is preparatory and with a terminal option, which means students receive vocational training as skilled technicians. Training in these schools lasts three years (SEP, 2009c).

See Upper secondary education

**Illiteracy**
Indicator showing the percentage of people aged 15 or older lacking reading, writing and basic calculation skills (SEP, 2009c).

**Impact**
Ensures that the learning attained by the assessment's object (students, educators, programmes, institutions) is assimilated in a long-lasting manner and leads to social behaviours backed by values that are fruitful to society and individuals (INEE, 2008).
<table>
<thead>
<tr>
<th>Indicator</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualitative or quantitative data, which along with others, shows the status of a particular object and provides bases to issue a determination on it (Wheeler et al., 1992).</td>
<td></td>
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<tr>
<td>Pre-primary education service for indigenous children aged four to six to teach them Spanish prior to their enrolment in primary education (SEP, 2009).</td>
<td></td>
</tr>
<tr>
<td>Primary education service offered in indigenous communities, which are usually under the Directorate General of Indigenous Education of the SEP. It is taught by teachers and bilingual promoters in the communities' native language and in Spanish to the population aged six to 14 (SEP, 2009).</td>
<td></td>
</tr>
<tr>
<td>Financial, human and material resources used in development interventions (OCDE, 2002).</td>
<td></td>
</tr>
<tr>
<td>Value judgement of an educational institution's quality, issued formally and publicly by an authorised external agency, resulting from a voluntary assessment process to verify fulfilment of established minimum quality standards and grant the institution a socially prestigious certificate in recognition for its efforts toward educational enhancement (SEP, 2009).</td>
<td></td>
</tr>
<tr>
<td>Test or examination for educational assessment to obtain a sample of behaviour or psychological attributes of an individual systematically and objectively (Hopkins, 1998).</td>
<td></td>
</tr>
<tr>
<td>Persons, groups, associations or organisations with a stake in the process and/or results of an assessment (Wheeler, Haertel and Scriven, 1992).</td>
<td></td>
</tr>
<tr>
<td>The aim is for the highest number of people possible to have access to schools, remain in them until the projected completion and graduate having reached the learning objectives (INEE, 2008).</td>
<td></td>
</tr>
<tr>
<td>Systematic and methodological process to gather information on the performance of a student or a group of students in relation to a set of expected learning and/or performance criteria or standards with the purpose of weighing its merit or value for specific decisions (Hopkins, 1998; ICSEE, 2003).</td>
<td></td>
</tr>
<tr>
<td>Official list of people who are the target of a federal social development programmes whose socioeconomic profile has been established in the corresponding legislation (DOF, 20 January 2004).</td>
<td></td>
</tr>
<tr>
<td>Basic education level that provides the knowledge necessary for graduates to enrol in upper secondary education or enter the productive sector. It is completed in three years and includes the following areas: general, for workers, distance learning and technical education; primary education is its compulsory antecedent (SEP, 2009).</td>
<td></td>
</tr>
<tr>
<td>Secondary education service taught in three grades to workers 15 years old and over who completed primary education. It is usually offered at night in general lower secondary schools. The study plans do not include technological or workshop-related activities (SEP, 2009).</td>
<td></td>
</tr>
</tbody>
</table>
M

Master's degree
Tertiary education that requires a bachelor's degree; students are trained in high-level professional activities in teaching and research and its duration is a minimum of one year (SEP, 2009c).

Matrix design
Layout of a complete set of test items covering the curriculum mastery to be evaluated, which is later subdivided into subsets of test items so that each student answers only some of them (INEE, 2005c).

Measurement
The assignation of numbers or categories to objects according to a series of specific rules (JCSEE, 2003).

Multiple-choice test component
Test item composed of a sentence that states a problem, statement or question followed by two to five answer options, only one of which is correct (Lyman, 1998; Osterlind, 1989).

N

Non-schooled modality
Education modality which is part of a system designed to provide education corresponding to instructional types and levels through regular tutoring sessions but students do not have to attend school daily; however, they must take a series of tests to certify their gradual progress toward programme completion; initial, special and adult education are also included (SEP, 2009c).

Normal education
Bachelor's degree, which prepares students to practise teaching in the different SEN types and levels. Its antecedent is high school. For regular courses duration is four years and for intensive programmes, six years (SEP, 2009c).

Norm-referenced test
Measuring instrument that interprets results by comparing the examinee’s performance with a reference group. Norm-referenced tests use population distribution as reference (Hopkins, 1998).

O

Operation rules
Provisions to which certain federal programmes and funds must adhere for the purpose of transparency and to ensure the efficient, effective, timely and equitable application of public resources allotted to them, thus avoiding discretionary decisions. These rules reflect the internal logic of the federal programme and are dynamic, according to its nature and evolution (DOF, 18 December 2009).

P

Performance-specific programme assessment
Synthetic assessment of a programme's performance, which shows progress made in compliance with objectives and goals scheduled based on a summary of information contained in the SED and analysis of indicators of results, services and management (CONEVAL, 2010b).

Pertinence
Quality of having an education system with a curriculum suited to the needs of society (INEE, 2008).
Physical education
Activity that allows student psychomotor development, provided by the SEP or state authorities in primary education, and by universities in higher education (SEP, 2009c).

Pilot tests
Gathering of preliminary data about a new programme, process or evaluation test to assess how it is functioning in a specific population and make adjustments for its improvement and subsequent implementation and/or application (Wheeler et al., 1992).

Preliminary study through which investigators or test makers test the statistical behaviour of instruments and application procedures in a group of subjects (INEE, 2005c).

Planning
Action of quantifying, rationalising and scheduling the utilization of human, material and financial resources necessary to ensure the functioning of their operation and maintenance (DOF, 7 December 1982a).

Population
Group of elements (persons, families, hospitals, etc.) placed in time and space.

Portfolio
An individual's set of products (essays, notebooks, etc.) used to assess their performance (Lyman, 1998).

Postgraduate degree
Tertiary education requiring a bachelor's degree or its equivalent. It is comprised by a specialisation, master's degree, doctorate, and continuous education courses taught in it (SEP, 2009c).

Pre-primary education
Basic educational level in which some knowledge is taught and habit formation and skill enhancement stimulated. It precedes primary education and is compulsory (SEP, 2009c).

Primary education
Basic education level in which students are taught scientific knowledge and social disciplines; it is compulsory and lasts six years (SEP, 2009c).

Primary education community courses
Primary education services oriented toward children aged six to 14 residing in communities with less than 100 inhabitants. They are generally taught by a single instructor and these services are managed by CONAFE (SEP, 2009c).

Private funding
Type of administrative control of schools that are self-financed and self-administered. Schools overseen by the SEP, a state or autonomous institutions are technically supervised by the corresponding authorities (SEP, 2009c).

Programme
Set of actions and strategies that permit the transformation of political discourse into specific interventions. Organised set of programmed activities that satisfy a sector's objective to reach one or several goals (DOF, 7 December 1982a).

Programme assessment
Systematic and objective analysis of budgetary programmes to determine the relevance and achievement of their objectives and goals, as well as their efficiency, efficacy, quality, economy, results, impact and sustainability (CONEVAL, 2010b).
<table>
<thead>
<tr>
<th>Term</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Quality of the national education system</strong></td>
<td>Quality resulting from the integration of suitability, relevance, internal and external efficacy, impact, aptness, efficiency and equity (INEE, 2008).</td>
</tr>
<tr>
<td><strong>Range</strong></td>
<td>Difference between lower and upper data in a distribution (Pagano, 2008).</td>
</tr>
<tr>
<td><strong>Reference profile</strong></td>
<td>Index or list of relevant content in relation with the mastery to be measured by an instrument (Osterlind, 1989).</td>
</tr>
<tr>
<td><strong>Refined Human Development Index</strong></td>
<td>Weighted average of indicators of child survival rates, adult literacy rates and income per capita. The states in Mexico were grouped into what were called states with high, medium or low index (Reimers, 2006).</td>
</tr>
<tr>
<td><strong>Regulatory examination</strong></td>
<td>Aim especially on testing the application of factual knowledge</td>
</tr>
<tr>
<td><strong>Representative sample</strong></td>
<td>Subset of the target population that reflects the variables measured in a distribution similar to that of the population.</td>
</tr>
<tr>
<td><strong>Results Indicator Matrix (MIR)</strong></td>
<td>Matrix that contains the following information: I. Narrative Summary: description of the key action sectors of the federal programme: a) Results: describes direct consequences of the federal programme on a situation, need or specific problem, called &quot;Purpose&quot;, as well as the expected programme contributions to a concrete aspect of the strategic objective of the agency or body, called programme's &quot;End&quot;, which must be closely linked to a strategic objective of the agency or body. This section must explain a) the Target Population of the programme; b) Products: describes goods and/or services that must be produced and/or delivered through the programme; and c) Management: describes financial, human and material resources used in a federal programme to produce and/or deliver the goods and/or services, as well as actions taken to exercise said resources, specifying the programme's targeting activities. II. Indicators: Quantitative, or qualitative if applicable, expression that provides a simple and reliable method for measuring achievements, reflecting changes associated with federal programme actions, monitoring and assessing its results. III. Means for gathering or verifying information: definition of information sources used to obtain the data utilized to calculate and measure the indicators. Verification means can be statistics, surveys, reviews, audits, registries or published material, among others. IV. Assumptions: description of external factors out of the control of competent bodies responsible for a federal programme but do affect achievement of its objectives (DOF, 30 March 2007).</td>
</tr>
<tr>
<td><strong>Retention Rates</strong></td>
<td>Percentage of students who enrol in the following year at the end of a certain period.</td>
</tr>
<tr>
<td><strong>Sample</strong></td>
<td>Subset of the population (JCSEE, 2003; Pagano, 2008).</td>
</tr>
<tr>
<td><strong>School</strong></td>
<td>Organised grouping of human and physical resources operating under the authority of a principal or responsible person to provide education for students in the same educational level and with a certain shift and schedule (SEP, 2009).</td>
</tr>
<tr>
<td><strong>School assessment</strong></td>
<td>Systematic process for gathering and analysing information according to</td>
</tr>
</tbody>
</table>
defined criteria on an educational centre's conditions, resources, processes and/or results for the purpose of establishing its value, foster reflection and inform decisions oriented toward its improvement (Figueroa 2004; Ruiz, 2004; SEP, 2007a, 2007b).

School centre
See School.

School centre quality
Comparison-based assessment in relation to a set of norms, characteristics, qualities and properties of all elements, processes, and results of educational institutions made in order to plan and meet specific goals that satisfy the educational requirements of students and society necessary for social, scientific and technological development (SEP, 2009c).

School performance
Abilities, skills and knowledge learned as a result of experience and formal education expressed by a grade (UNAM - DGEE, 2008).

School self-assessment
1. Systematic process of diagnosis and reflection by an organisation based on the observation of its own processes and results, it can be carried out by using different instruments and communication strategies and it is shared by the school's faculty and administrators. Identification of strengths and areas of opportunity of the teaching practice (conditions, processes and results) to project substantive reinforcement and improvement actions as its objective (SEP, 2002a).

2. Systematic analysis process of the functioning of a school centre carried out by its own staff. This process is about reflecting on the centre's actual condition with the aim of attaining continuous improvement of services offered, processes involved and, consequently, of the results (SEP, 2007a).

Schooled modality
Education modality provided to students that attend an educational centre daily according to school days marked on the school calendar. It is part of a system designed to provide education corresponding to instructional types and levels (SEP, 2009c).

Social development
Development of human and social capital in a society. It implies positive evolution or change in the relationships of individuals, groups and institutions in a society. It implies mainly economic and human development. Its future project is social wellbeing (DOF, 20 January 2004).

Special education
Educational service provided by the SEN to children and youth who, because of their physical or mental characteristics, have difficulty advancing in regular schools and becoming part of society; the objective is to provide them with specialised attention that makes it possible for them to develop as autonomous persons and help them integrate and participate in society (SEP, 2009c). There are public and private schools and institutions offering these services, which follow programmes in force and use special material.

Specialisation
Post-graduate education service, which even though it precedes a master's degree, is not necessarily its antecedent. It is offered by higher education institutions through courses focused on a topic; its duration is generally one year or one semester. Generally, these studies are not considered an academic degree (SEP, 2009c).

Standardised test
Also known as objective test; a measuring instrument that is developed,
applied and graded following determined procedures.

**State funding**

A type of administrative control of schools financed, administered and technically supervised by the public education agency of each state (SEP, 2009c).

**Student**

A person enrolled in any school grade of the different modalities, types, levels and services of the National Educational System (SEP, 2009c).

**Student performance**

Abilities, skills and knowledge learned as the result of experience and formal education, and which is gradee (UNAM-DGEE, 2008).

**Sufficiency**

Having sufficient human and material resources (INEE, 2008).

**Suitability**

Quality of having an educational system with a curriculum suited to students’ needs (INEE, 2008).

**Summative assessment**

Type of assessment that: 1) certifies or grades attainment of terminal learning objectives and 2) determines a programme's efficiency (Gronlund, 1998). In learning assessment, it includes learning acquired throughout a didactic sequence so educators and students know the level of achievement obtained (SEP-DGME, 2010).

**Teacher**

A person that provides knowledge and guidance to students as part of the teaching and learning process (SEP, 2009c).

**Teacher education**

Refers to the policies and procedures designed to equip prospective teachers with the knowledge, attitudes, behaviors and skills they require to perform their tasks effectively in the classroom, school and wider community.

**Technical education**

Upper secondary education to prepare technicians in industrial and services fields. Lower secondary education is its antecedent. The studies are preparatory and terminal. Completion varies from two to four years and the aim is to train students for entrance into the job market. In addition, the objective includes students acquiring the knowledge necessary to enrol in higher education schools if they so wish (SEP, 2009c).

**Technical lower secondary school**

Secondary educational service attended after completing primary school. The aim is to prepare students for entrance at the upper secondary level and give them the opportunity to become part of the job market through a preparatory technological education. The academic plan includes subjects of general lower secondary education in addition to subjects designed to train students in technological, industrial, commercial, agricultural, fishery and forestry fields (SEP, 2009c).

**Technological /Vocational upper secondary education**

Upper secondary level, which provides students with the knowledge needed for entrance into higher education and train them to be qualified technicians in specific technological branches of agriculture, forestry, industry and services and the sea. The duration of this service is six semesters (SEP, 2009c).

**Technological bachelor's degree**

Tertiary education for technical training of students in the fields of agriculture, industrial, forestry, maritime and services (SEP, 2009c).
Televised upper secondary distance education

Upper secondary education service taught through television, closed or open circuit, whose aim is to expand the teaching and learning process to offer access to information and knowledge to a greater number of persons. Students must enrol and take tests to obtain accreditation documents and legalise their studies (SEP, 2009c).

Televised lower secondary distance education

Education service provided by secondary education programmes mainly through televised means. It follows the same study programmes of general lower secondary schools and it is offered mainly to the adolescent population living in scattered communities lacking general or technical lower secondary schools (SEP-DGPP, 2008).

Test

See Instrument.

Test component

Basic unit of measurement in an instrument consisting of a question, statement or instruction requiring a response from the examinee, based on which its execution or performance in a psychological construct or domain can be inferred.

University bachelor's degree

Tertiary education to train students in the fields of Education and Humanities, Health Sciences, Natural and Applied Sciences, Social and Administrative Sciences and Engineering majors that are not part of the Agricultural Sciences Area (SEP, 2009c).

Upper secondary education

Educational type whose preceding compulsory studies are lower-secondary education. It includes high school and technical education. The duration is from two to four years (SEP, 2009c).

Upper secondary education/general

Upper secondary, preparatory and/or terminal, level available to lower secondary graduates which, when preparatory in nature, enables entrance to tertiary education (SEP, 2009c).

Variable

Property, condition or characteristic, which can fluctuate and whose fluctuation is susceptible to measurement or observation.

Vocational programmes

Education service provided by the SEN to people over 15 years of age for entrance to productive activity. Completion varies: 10 weeks and up to four years, depending on training type; courses last between 100 and 450 hours for three to five months and students are prepared in industrial, agricultural, business and service techniques. Completion of basic education is a requisite. Its nature is terminal and it is not equivalent to lower-secondary education (SEP, 2009c).
Currently, the SEN’s rules, the right to education and the conditions under which this service must be granted are established in: Articles 3 and 31 of the current Political Constitution of the United Mexican States [CPEUM] (CPEUM, 1917), the General Education Law [LGE], the Federal Government Organisational Law (Article 38) and the Interior Rules of the Secretariat of Public Education. In addition, these must be granted in accordance with the current administration’s plans: the 2007-2012 National Development Plan and the 2007-2012 Education Sector Programme. Finally, they must coincide with two political agreements in effect: the National Agreement for the Modernisation of Basic Education [ANMEB], signed in 1992, and the Education Quality Agreement [ACE], signed in 2008. This last agreement is not described in this annex because it is thoroughly addressed in the corresponding chapter. The most important parts of these provisions are listed below.

a) Constitutional Articles (CPEUM, 1917)

Article 3 of the Political Constitution of the United Mexican States establishes that every person has the right to free secular education and that the federal government, the states, and the municipalities must provide it at the pre-school (2002), primary (1917) and lower secondary (1993) levels. In addition, public education must aim to harmoniously develop all human faculties while fostering patriotism and an awareness of international solidarity, independence and justice.

Article 31 of the Political Constitution of the United Mexican States establishes that Mexicans must ensure that their children or that pupils attend public or private schools in order to obtain pre-school, primary and lower secondary education and to undergo selective military service.

b) The National Agreement for the Modernisation of Basic Education [ANMEB]

The ANMEB outlines four strategies (SEP, 1992):

1) An increase in federal and state spending on education.

2) A reorganisation of the education system, with two focal points: a) educational federalism that transfers schools as well as basic education and normal school material and financial resources to state governments, with the central government responsible for regulation, and b) social participation that includes teachers, heads of family and the authorities in order to secure a more solid link between the community and the correct operation of schools.

3) The reformulation of educational content and materials: reform of pre-school content and methods; programmes of study and primary education school text books; and reintroduction of the per subject (not area) programme in lower secondary school.

4) Reassessment of the teacher’s role: refresher courses, professional wages, housing, the teaching career and social appreciation for the teacher’s work. This latest strategy met the SNTE’s labour demands (a new pay scale for the national teaching profession), legal demands (title to workers’ representation), internal organisational demands (integrity as a national professional organisation), and political demands (its role as SEP delegate in large-scale decisions regarding the SEN).

The ANMEB is known as the agreement of the three r’s because it established three important policy lines for the purpose of promoting quality and equitable basic education for all. These policy lines are: the Reorganization of the SEN, the Reformulation of educational content and materials and the Reassessment of the teacher’s role (Zorrilla and Barba, 2006).

Reorganization of the SEN:

- The attainment of authentic educational federalism by transferring responsibilities and resources to states in order to operate their basic education and teacher training systems, as well as the promotion of novel community participation to the benefit of education, which translates into a true — not coercive, but persuasive and meaningful — social auditing of education.

- State government recognition of the National Teachers Union as the title-holder of basic worker collective labour relations.

- Federal government maintenance of regulatory capacity and, especially, its balancing role among states and regions.
The reformulation of educational content and materials:

- Curricular and pedagogical reform of basic education levels (pre-school, primary and lower secondary).
- Renewal of free textbooks and extended production of educational materials for students and teachers.

Reassessment of the teacher’s role:

- The teacher is the protagonist of Mexico’s educational transformation. The teacher transmits knowledge, encourages intellectual curiosity and must be an example of self-improvement. The teacher is the person who is most familiar with the education system’s strengths and weaknesses. Without the teacher’s decisive commitment, any attempt at reform will be hindered; therefore, one of educational transformation’s main goals is to reassess the teacher’s role.

- The teacher must be one of the primary beneficiaries of this new educational federalism and community participation in education.

- The reassessment of the teacher’s role consists of six main principles: teacher training, refresher courses, professional wages, housing, the teaching career and social appreciation for his or her work.

c) General Education Law [LGE]

In 1993, the LGE was passed. It’s most recent reform was passed in 2009. Its established goals are:

1) The acquisition of student knowledge, capacity for observation, analysis and critical thinking.

2) The promotion of knowledge and valuing the traditions and cultural idiosyncrasies of the country's different regions.

3) The promotion of the awareness of the country’s linguistic plurality and respect for the linguistic rights of indigenous populations, specifying that “speakers of indigenous languages must have access to mandatory education in their own languages and in Spanish”.

4) The promotion of attitudes that stimulate research and scientific and technological innovation.

5) The promotion of artistic creation and the acquisition, enrichment and dissemination of universal cultural values and assets.

6) The encouragement of physical education and sports.

7) The development of responsible attitudes toward the preservation of health, paternity and family planning.

8) Education in the concepts and basic principles of environmental science, sustainable development and environmental value and protection.

9) The promotion of positive attitudes toward work, savings and general well-being.

PROSEDU

The [PND] is drafted by law within the first six months of each new federal administration. The current plan encompasses the period from 2007 to 2012. In the current administration, the plan is considered an education policy under Focal Point 3: Equal Opportunities, specifically in Section 3.3: Educational Transformation (Presidencia de la República, 2007).

The 2007-2012 Education Sector Programme [PROSEDU] is subject to the provisions of the PND and specifies the objectives, priorities and policies that govern the performance of sector activities (SEP, 2007). The PROSEDU was developed around six objectives, which are divided into 41 indicators, out of which 22 are basic education indicators, and goals established for 2012. These six objectives are:

1. To elevate the quality of education so students improve their levels of academic achievement, have a means of access to improved well-being and contribute to national development.
Better educational quality. The criteria for improving quality must be applied to the training of teachers, the updating of study programmes and their contents, pedagogical focuses, teaching methods and teaching resources. An area that will be addressed is the modernisation and maintenance of education infrastructure, as well as the attainment of an improved connection among and within all types and levels. This assessment will be a fundamental tool for analysing the quality, relevance, and pertinence of the design and the operation of public policy in education matters. The assessment must be approached as having three dimensions: as an accountability exercise, as a tool for disseminating parental results and as a means of support for the design of public policy. Assessment indicators must be pertinent and have a bearing on proposals for continuing improvement.

2. To extend educational opportunities in order to decrease inequalities among social groups, close gaps and promote equality.

Improved equality in educational opportunities regarding gender among regions and social groups, such as indigenous peoples, immigrants and emigrants and individuals with special education needs. In order to obtain this, it is necessary to extend coverage, student entry into schools and continued enrolment; to combat out-dated educational practices; and to substantially improve quality and participation. Mexico’s current demographic mandates an increased effort regarding upper secondary education, where extensive reform is proposed.

3. To promote the development and use of information and communication technologies in the education system in order to provide support for student learning, increase student life abilities and favour student entry into knowledgeable society.

The use of information and communications technologies in teaching so that Mexico may successfully participate in knowledgeable society. Research, scientific and technological development and the incorporation of technology into classrooms will be promoted in order to provide support for student learning. Scientific and technological education will be strengthened, beginning with the basic education level. These items will contribute to Mexico's development of research and production activities in these fields.

4. To offer integral education that balances the formation of citizen values, the development of abilities and the acquisition of knowledge through regular classroom activities, teaching practices and the school environment in order to strengthen democratic and intercultural coexistence.

A public policy that, in strict adherence with Article 3 of the Political Constitution of the United Mexican States, promotes secular, free and participatory education oriented toward the formation of free, responsible and creative citizens who respect cultural diversity — an education that, above all, promotes an individual's honourable development so that he or she may fulfil his or her potential and that permits him or her to acknowledge and defend his or her rights and comply with his or her responsibilities. In order to implement this priority, study programmes and procedural models will be used to balance the acquisition of knowledge and the development of skills in scientific, humanistic, linguistic and communicative, cultural, artistic and sports areas using ethic development, tolerance and democratic values.

5. To offer quality education services in order to shape individuals with a heightened sense of social responsibility and who participate productively and competitively in the workforce.

Relevant and pertinent education that promotes sustainable development, productivity and employment. In order to attain this, it is necessary to update and integrate upper secondary and tertiary education plans and programmes; develop more and better terminal options that are linked to the workforce and that permit students to acquire more experience and remain competitive; promote research for humanistic, scientific and technological development; again address social service; and create an ambitious education programme for work and life.
6. To promote school and institutional management that strengthens the participation of schools in decision-making; holds different social and educational players jointly accountable; and promotes the safety of students and teachers, transparency and accountability. In addition, this addresses five key points: a) assessment, b) infrastructure, c) systems of information, d) the legal framework for the education sector and e) improvement in institutional management.

A full democratisation of the educational system that opens up institutional spaces for participating to heads of family and new players, such as non-profit organisations, for the purpose of strengthening the community surrounding each school. This democratisation will strengthen educational federalism, transparency and accountability, as well as increase the extent to which cultural diversity is valued. A safe school environment will be obtained for improving school community development. This will be accomplished through reinforcing member participation and promoting practices and attitudes that eliminate unsound conduct.

Resource estimation for executing the 2007-2012 PROSEDU will be determined in the budget projects annually submitted by the SEP. These resources will be subject to availability.

The tools and those responsible for executing the programme are determined in accordance with the authorities and powers listed in the SEP’s Interior Rules, as well as in accordance with the SEP’s role as sector coordinator with regard to organisational agencies pertaining to this sector. Sector priorities are set in the goals established in the sector programme. In order to reach these goals, the SEP’s efforts are built upon a framework consisting of the objectives, strategies and courses of action indicated here. Below you will find the 41 indicators of the 2007-2012 PROSEDU, per objective, as well as the 2012 goals (SEP, 2007).
### Objective 1.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Unit of Measurement</th>
<th>2012 Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>PISA exam grading on mathematics and reading comprehension tests</td>
<td>Between 200 and 800 points (800 is the highest score.)</td>
<td>435</td>
</tr>
<tr>
<td>Percentage of students with at least elementary academic achievement on the ENLACE test (The test levels are insufficient, basic, good and excellent.)</td>
<td>Percentage of students tested Primary Spanish = 82% Mathematics = 83% Lower Secondary Spanish = 70% Mathematics = 53%</td>
<td></td>
</tr>
<tr>
<td>Reviewing, updating and linking of subject programmes or other learning units by level and basic education grade</td>
<td>Subject programme All reviewed, updated and linked subject programmes (87)</td>
<td></td>
</tr>
<tr>
<td>Percentage of public school teachers who are up to date and/or trained in basic education reform programmes</td>
<td>Percentage of teachers 87.9% (973,020)</td>
<td></td>
</tr>
<tr>
<td>Percentage of federal public school teachers who participated in refresher and/or training courses linked to upper secondary education reform programmes</td>
<td>Percentage of teachers EMS = 100%</td>
<td></td>
</tr>
<tr>
<td>Percentage of full-time tertiary education teachers who took refresher and/or training courses</td>
<td>Percentage of full-time teachers with a postgraduate degree 72%</td>
<td></td>
</tr>
<tr>
<td>Percentage of basic education teachers trained in teaching mathematics through materials and workshops</td>
<td>Percentage of teachers 74.7% (419,210 trained teachers)</td>
<td></td>
</tr>
<tr>
<td>Lower secondary school graduation rate</td>
<td>Percentage of students who finish lower secondary school 86.7%</td>
<td></td>
</tr>
<tr>
<td>Percentage of schooled indigenous children who finish the primary education level in schools coded for indigenous education</td>
<td>Percentage of indigenous children from age 6 to 14 who finish the primary education level in schools coded for indigenous education 754,903 (88.1%)</td>
<td></td>
</tr>
<tr>
<td>Terminal efficiency</td>
<td>Graduates per education type EMS = 65.7% ES = 70%</td>
<td></td>
</tr>
<tr>
<td>Educational orientation</td>
<td>Percentage of students who have access to educational orientation in federal upper secondary schools. 100% of students</td>
<td></td>
</tr>
<tr>
<td>Percentage of enrolment in tertiary education programmes up to level 1, which is granted by interinstitutional committees for evaluating tertiary education and/or accredited by the Council for the Accreditation of Tertiary Education</td>
<td>Percentage of students in level 1 and/or accredited tertiary education programmes 60.0%</td>
<td></td>
</tr>
<tr>
<td>Indicator</td>
<td>Unit of Measurement</td>
<td>2012 Goal</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>------------------------------------------</td>
<td>--------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>List of Oportunidades scholarship students enrolled in basic education</strong></td>
<td>Number of scholarships</td>
<td>EB = 5 million*</td>
</tr>
<tr>
<td>Scholarships provided to young mothers and young pregnant students for finishing basic education</td>
<td>Number of scholarships</td>
<td>49,460 scholarships</td>
</tr>
<tr>
<td>Upper secondary education scholarships for students who come from homes whose family income falls under the poverty line established by the National Council for the Evaluation of Social Development Policy and who do not receive Oportunidades scholarships</td>
<td>Number of scholarships</td>
<td>250,000*</td>
</tr>
<tr>
<td>Tertiary education scholarships for students who come from homes whose family income falls within the first four deciles</td>
<td>Number of scholarships</td>
<td>ES = 400,000*</td>
</tr>
<tr>
<td><strong>Education coverage</strong></td>
<td>Enrolment (schooled)</td>
<td>EB = 99%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>EMS = 68%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ES = 30%</td>
</tr>
<tr>
<td><strong>Basic education coverage in the eight poorest states</strong> (Oaxaca, Chiapas, Durango, San Luis Potosí, Puebla, Guerrero, Veracruz and Tabasco)</td>
<td>Percentage of the population enrolled in the corresponding states</td>
<td>99%</td>
</tr>
<tr>
<td><strong>Number of states with at least 25% tertiary education coverage</strong></td>
<td>Number of states</td>
<td>18 have at least 25% coverage</td>
</tr>
<tr>
<td><strong>Indigenous children enrolled in pre-school and primary school</strong></td>
<td>Indigenous pre-school and primary school students from ages 4 to 14 — 1,594,850 (40.89%) — indigenous pre-school and primary school students</td>
<td>2,340,000 (60%) indigenous pre-school and primary school students</td>
</tr>
<tr>
<td><strong>Telesecondary classrooms equipped with computer and communication technologies, as well as educational materials</strong></td>
<td>Equipped classrooms</td>
<td>65,420 classrooms (100%)</td>
</tr>
<tr>
<td><strong>People between the ages of 15 and 39 who finish lower secondary school</strong></td>
<td>People from the 15 to 39 age group who finish lower secondary school</td>
<td>Three million people between the ages of 15 and 39 who have finished lower secondary school</td>
</tr>
<tr>
<td><strong>Years of study for the 25 to 64 age group</strong></td>
<td>Years of study</td>
<td>9.7 years</td>
</tr>
</tbody>
</table>
### Objective 3.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Unit of Measurement</th>
<th>2012 Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Media rooms equipped with educational telematics for general and technical</td>
<td>Media rooms</td>
<td>301 593 classrooms (100%)</td>
</tr>
<tr>
<td>primary and lower secondary schools</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Students per computer with Internet access for educational use in federal</td>
<td>Number of upper secondary education students per computer</td>
<td>10 students per computer</td>
</tr>
<tr>
<td>upper secondary education establishments</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percentage of public tertiary education institutions with Internet</td>
<td>Public tertiary education institutions with Internet</td>
<td>100%</td>
</tr>
<tr>
<td>connections in libraries</td>
<td>connections in libraries</td>
<td></td>
</tr>
<tr>
<td>Percentage of primary and lower secondary school teachers trained in the</td>
<td>Percentage of trained teachers</td>
<td>682 125 (75% trained teachers)</td>
</tr>
<tr>
<td>educational use of computer and communication technologies in the</td>
<td></td>
<td></td>
</tr>
<tr>
<td>classroom</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Annual, not an accumulated goal

### Objective 4.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Unit of Measurement</th>
<th>2012 Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public schools at the primary education level that are part of the Full-</td>
<td>Primary education schools</td>
<td>5 000 full-time schools</td>
</tr>
<tr>
<td>Time School Programme</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educational materials for civic education and democratic and intercultural</td>
<td>Educational materials</td>
<td>58 materials</td>
</tr>
<tr>
<td>coexistence for primary and lower secondary schools</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Schools that carry out activities for developing citizen competency and</td>
<td>Federal school</td>
<td>90% of federal schools</td>
</tr>
<tr>
<td>the prevention of high-risk behaviour in upper secondary education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percentage of educational programmes in technology institutes, technology</td>
<td>Educational programmes with a focus on competence</td>
<td>40%</td>
</tr>
<tr>
<td>universities and polytechnic universities oriented toward the development</td>
<td></td>
<td></td>
</tr>
<tr>
<td>of professional competence</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Objective 5.**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Unit of Measurement</th>
<th>2012 Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scholarships for workforce internships</td>
<td>Number of scholarships granted</td>
<td>5 000</td>
</tr>
<tr>
<td>People up-to-date and trained in work training centres</td>
<td>Up-to-date and trained people</td>
<td>880 000</td>
</tr>
<tr>
<td>People up-to-date and trained via online work training centres</td>
<td>Up-to-date and trained people</td>
<td>130 000</td>
</tr>
<tr>
<td>Percentage of work training courses offered within the educational model</td>
<td>Percentage of work training courses offered within the</td>
<td>47% of courses offered within the educational</td>
</tr>
<tr>
<td>framework based on competency</td>
<td>educational model framework based on competency</td>
<td>educational model framework based on competency</td>
</tr>
<tr>
<td>Percentage of public tertiary institutions with job placement boards.</td>
<td>Percentage of public tertiary institutions with job</td>
<td>75%</td>
</tr>
<tr>
<td></td>
<td>placement boards.</td>
<td></td>
</tr>
</tbody>
</table>
Objective 6.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Unit of Measurement</th>
<th>2012 Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public primary and lower secondary schools that are part of the Safe School Program</td>
<td>Public primary and lower secondary schools that are part of the Safe School Program</td>
<td>36,648 (30%)</td>
</tr>
<tr>
<td>School boards or the state equivalent that participates in the basic education strategic management model</td>
<td>School boards</td>
<td>50,000</td>
</tr>
<tr>
<td>Primary and lower secondary school directors of the Quality Schools Programme who are trained in strategic management</td>
<td>Trained directors</td>
<td>40,000 trained directors</td>
</tr>
<tr>
<td>Percentage of directors of federal upper secondary education facilities who are hired by means of an entrance examination</td>
<td>Directors</td>
<td>100% of directors of federal facilities who are hired by means of an entrance examination</td>
</tr>
<tr>
<td>Percentage of tertiary education institutions whose communities participate in the drafting of the Institutional Strengthening Programme</td>
<td>Percentage of tertiary education institutions whose communities participate in the drafting of the Institutional Strengthening Programme</td>
<td>90%</td>
</tr>
</tbody>
</table>

e) The Interior Rules of the SEP

The Interior Rules of the SEP describe its organisation and determine the competencies, authorities, functions and attributes of each of the secretariat’s responsible units, for example, the secretary of public education, undersecretaries, units and general directorates (DOF, 11 October 2006).
ANNEX B. CURRENT SEN STRUCTURE AND DIMENSIONS

Table 1. Other services the National Education System provides

<table>
<thead>
<tr>
<th>Education Services</th>
<th>Early education</th>
<th>Special education</th>
<th>Work training</th>
<th>Adult education</th>
<th>Open systems</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Infants</td>
<td>Multi-service centres</td>
<td>Work training centres</td>
<td>Literacy teaching</td>
<td>Upper secondary</td>
</tr>
<tr>
<td></td>
<td>Toddlers</td>
<td>General Education Service Unit</td>
<td></td>
<td>Primary</td>
<td>Tertiary</td>
</tr>
<tr>
<td></td>
<td>Education of heads of family</td>
<td></td>
<td></td>
<td>Lower secondary</td>
<td></td>
</tr>
</tbody>
</table>

1 In 2008, 706 164 children were attended to (SEP, 2009c).
2 In 2008, 397 694 people were attended to (SEP, 2009c).
3 Please consult the following page for more information: http://www.inea.gob.mx. In 2008, 1 233 204 people were attended to (SEP, 2009c).

Table 2. Basic figures for National Education System enrolment: number of teachers and schools by education level (2008-2009 school year)

<table>
<thead>
<tr>
<th>Type of Education</th>
<th>Level</th>
<th>Students</th>
<th>Teachers</th>
<th>Schools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic education</td>
<td>Preschool</td>
<td>4 634 412</td>
<td>218 206</td>
<td>89 395</td>
</tr>
<tr>
<td></td>
<td>Primary</td>
<td>14 815 735</td>
<td>568 752</td>
<td>98 575</td>
</tr>
<tr>
<td></td>
<td>Lower secondary</td>
<td>6 153 459</td>
<td>369 548</td>
<td>34 380</td>
</tr>
<tr>
<td></td>
<td>Subtotal</td>
<td>25 603 606</td>
<td>1 156 506</td>
<td>222 350</td>
</tr>
<tr>
<td>Upper secondary</td>
<td>Professional technical education</td>
<td>366 964</td>
<td>28 962</td>
<td>1 426</td>
</tr>
<tr>
<td>secondary education</td>
<td>High school</td>
<td>3 556 858</td>
<td>243 855</td>
<td>12 677</td>
</tr>
<tr>
<td></td>
<td>Subtotal</td>
<td>3 923 822</td>
<td>272 817</td>
<td>14 103</td>
</tr>
<tr>
<td>Tertiary education</td>
<td>Technical tertiary</td>
<td>91 530</td>
<td>10 055</td>
<td>205</td>
</tr>
<tr>
<td></td>
<td>Undergraduate</td>
<td>2 428 144</td>
<td>244 318</td>
<td>3 702</td>
</tr>
<tr>
<td></td>
<td>Postgraduate</td>
<td>185 516</td>
<td>36 895</td>
<td>1 653</td>
</tr>
<tr>
<td></td>
<td>Subtotal</td>
<td>2 705 190</td>
<td>283 818</td>
<td>4 228</td>
</tr>
<tr>
<td></td>
<td>Subtotal schooled education</td>
<td>32 232 618</td>
<td>1 713 141</td>
<td>240 681</td>
</tr>
<tr>
<td></td>
<td>Work training</td>
<td>1 514 568</td>
<td>37 164</td>
<td>5 660</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>33 747 186</td>
<td>1 750 305</td>
<td>246 341</td>
</tr>
</tbody>
</table>

Footnotes:
1 Figures are estimated because official results are not available. This service is considered because the SEP considers it in the complete figure.
### Table 3. Basic figures for the National Education System. Enrolment by control type\(^1\) (2008-2009 school year)

<table>
<thead>
<tr>
<th>Type of Education</th>
<th>Level</th>
<th>Federal</th>
<th>State</th>
<th>Autonomous</th>
<th>Private</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic education</td>
<td>Preschool</td>
<td>382 302</td>
<td>3 567 731</td>
<td>1 820</td>
<td>682 559</td>
</tr>
<tr>
<td></td>
<td>Primary</td>
<td>869 624</td>
<td>12 717 259</td>
<td><strong>NA</strong></td>
<td>1 228 852</td>
</tr>
<tr>
<td></td>
<td>Lower secondary</td>
<td>423 751</td>
<td>5 256 263</td>
<td>1 878</td>
<td>471 567</td>
</tr>
<tr>
<td>Subtotal</td>
<td></td>
<td><strong>1 675 677</strong></td>
<td><strong>21 541 253</strong></td>
<td><strong>3 698</strong></td>
<td><strong>2 382 978</strong></td>
</tr>
<tr>
<td>Upper secondary education</td>
<td>Professional Technical Education</td>
<td>64 347</td>
<td>228 744</td>
<td>20 941</td>
<td>52 932</td>
</tr>
<tr>
<td></td>
<td>High school</td>
<td>956 438</td>
<td>1 447 682</td>
<td>480 236</td>
<td>672 502</td>
</tr>
<tr>
<td>Subtotal</td>
<td></td>
<td><strong>1 020 785</strong></td>
<td><strong>1 676 426</strong></td>
<td><strong>501 177</strong></td>
<td><strong>725 434</strong></td>
</tr>
<tr>
<td>Tertiary education</td>
<td>Technical tertiary</td>
<td>1 049</td>
<td>80 926</td>
<td>5 410</td>
<td>4 145</td>
</tr>
<tr>
<td></td>
<td>Undergraduate</td>
<td>367 089</td>
<td>286 052</td>
<td>973 903</td>
<td>801 100</td>
</tr>
<tr>
<td></td>
<td>Postgraduate</td>
<td>16 996</td>
<td>7 144</td>
<td>70 838</td>
<td>90 538</td>
</tr>
<tr>
<td>Subtotal</td>
<td></td>
<td><strong>385 134</strong></td>
<td><strong>374 122</strong></td>
<td><strong>1 050 151</strong></td>
<td><strong>895 783</strong></td>
</tr>
<tr>
<td>Subtotal schooled education</td>
<td></td>
<td><strong>3 081 596</strong></td>
<td><strong>23 591 801</strong></td>
<td><strong>1 555 026</strong></td>
<td><strong>4 004 195</strong></td>
</tr>
<tr>
<td>Work training(^1)</td>
<td></td>
<td>378 952</td>
<td>541 731</td>
<td>30 272</td>
<td>563 613</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td><strong>3 460 548</strong></td>
<td><strong>24 133 532</strong></td>
<td><strong>1 585 298</strong></td>
<td><strong>4 567 808</strong></td>
</tr>
</tbody>
</table>

\(^1\)Control types: federal, state, private and autonomous.
\(^2\)NA = Does not apply for this education level.
\(^3\)Figures are estimated because official results are not available. This service is considered because the SEP considers it in the complete figure.

ANNEX C. BASIC EDUCATION STUDY PLANS AND PROGRAMMES

As a fundamental objective of the 2007-2012 Education Sector Program, the Secretariat of Public Education proposed the “elevation of the quality of education so that students improve their level of academic achievement, are able to access improved wellbeing and contribute to national development” (SEP, 2007d, p.11). The main strategy for executing this basic education objective proposes the “implementation of integral reform to basic education centred on the adoption of an educational model that is based on competencies that respond to Mexico’s 21st century developmental needs”, with the goal of attaining increased efficiency and connectivity among preschools, primary and lower secondary schools (SEP, 2007d, p.23).

It is worth highlighting that as of this date, there has been progress regarding the framework for this Comprehensive Reform of Basic Education [RIEB], in which the General Directorate of Curricular Development [DGDC] of the Undersecretariat of Basic Education plays an important role. In 2004, the Pre-school Education Reform was proposed. In 2006, the Lower secondary Education Reform [RES] was proposed, which revealed the need to link curriculums among the three levels, as well as to make adjustments to the primary education curriculum in order to favour such link (SEP, 2006a, 2009b).

The purpose of the Pre-school Education Reform is to contribute to the transformation and improvement of pedagogical practices so that they favour the development of cognitive and socio-affective abilities in children. These are the basis for permanent learning (SEP, 2004, 2009b). In order to analyse the current and prior focuses at the preschool level and the current curricular map, see tables 1 and 2, respectively.

Table 1. Description of current and prior focuses at the pre-school level

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Focus</td>
<td>Restrictions on Implementation</td>
</tr>
<tr>
<td>Constructivist focus oriented toward the development of four spheres: physical, affective, intellectual and social</td>
<td>Pre-school education is still considered a space for the attention and training of children that lacks valuable educational contents and methods, or it is considered an exclusively preparatory level.</td>
</tr>
<tr>
<td>Method per projects as an operative structure, beginning with children’s experiences</td>
<td>The routine execution of courteous, organizational and hygienic practices is common for exercising muscle coordination, or activities without any educational goal.</td>
</tr>
<tr>
<td>The fundamental roles of games and the body as expressive elements</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 2. Organization of the current pre-school education programme (2004)

<table>
<thead>
<tr>
<th>Programme Foundations</th>
<th>Programme Components</th>
<th>Learning Fields for Skill Development</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population ages 3 to 5</td>
<td>Competencies</td>
<td>Personal and social development</td>
</tr>
<tr>
<td>Quality pre-school education</td>
<td>Pedagogical principles</td>
<td>Language and communication</td>
</tr>
<tr>
<td>Characteristics and potentials</td>
<td>Work and evaluation methods</td>
<td>Mathematical thinking</td>
</tr>
<tr>
<td>The social role of pre-school education</td>
<td></td>
<td>Exploration and knowledge of the world</td>
</tr>
<tr>
<td>Fundamental goals: skill development</td>
<td></td>
<td>Artistic expression and appreciation</td>
</tr>
</tbody>
</table>
<pre><code>                                                             |                                                             | Physical development and health                           |
</code></pre>

In turn, the purpose of the Lower secondary Education Reform is to ensure the consolidation of basic life skills, renew the study plan and programmes, permanently and systematically support the professionalization of teachers and directors at this level, improve school infrastructure and equipment, and promote new methods of organisation and management that strengthen schools (SEP, 2006). In order to analyse the current and prior focuses at the lower secondary education level and the current curricular map, see tables 3 and 4, respectively.
Report of Basic Education Assessment Practices in Mexico, 2010

Table 3. Description of current and prior focuses at the lower secondary education level

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Focus</strong></td>
<td><strong>Restrictions on</strong></td>
<td><strong>Focus</strong></td>
</tr>
<tr>
<td>Centred on the student’s</td>
<td>Large amount of content</td>
<td>Continuity of the</td>
</tr>
<tr>
<td>previous experiences and</td>
<td>from the study programmes</td>
<td>approaches established in</td>
</tr>
<tr>
<td>ideas</td>
<td>of various subjects</td>
<td>1993</td>
</tr>
<tr>
<td>Oriented toward favouring</td>
<td>Fragmentation of content</td>
<td>Emphasis on developing</td>
</tr>
<tr>
<td>reflexion, comprehension,</td>
<td>Given class time, multiple</td>
<td>skills</td>
</tr>
<tr>
<td>teamwork and strengthening</td>
<td>materials and the number</td>
<td>Definition of expected</td>
</tr>
<tr>
<td>attitudes in order to</td>
<td>of teachers, integration</td>
<td>learning (possess programs</td>
</tr>
<tr>
<td>participate in a democratic</td>
<td>work is not carried out</td>
<td>in which it is specified</td>
</tr>
<tr>
<td>and participatory society</td>
<td></td>
<td>what is expected for</td>
</tr>
<tr>
<td>The goal is to reorient</td>
<td></td>
<td>students to learn)</td>
</tr>
<tr>
<td>educational practises to</td>
<td></td>
<td>Establishment of clear</td>
</tr>
<tr>
<td>emphasize the development</td>
<td></td>
<td>proposals for the</td>
</tr>
<tr>
<td>of capacities and skills</td>
<td></td>
<td>integration of subjects</td>
</tr>
<tr>
<td>regarding the predominantly</td>
<td></td>
<td>Incorporation of themes</td>
</tr>
<tr>
<td>memorization and</td>
<td></td>
<td>that cover more than one</td>
</tr>
<tr>
<td>informative learning</td>
<td></td>
<td>subject</td>
</tr>
<tr>
<td>perspective</td>
<td></td>
<td>Decrease in the number of</td>
</tr>
<tr>
<td>Emphasis on basic knowledge</td>
<td></td>
<td>subjects per grade</td>
</tr>
<tr>
<td>and the development of</td>
<td></td>
<td>Connection with previous</td>
</tr>
<tr>
<td>skills and attitudes</td>
<td></td>
<td>basic education levels</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Better flexibility</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Taking advantage of</td>
</tr>
<tr>
<td></td>
<td></td>
<td>information and</td>
</tr>
<tr>
<td></td>
<td></td>
<td>communication technologies</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Diversity and interculturality</td>
</tr>
</tbody>
</table>

Table 4. Current curricular map of the lower secondary education plan and programmes (2006)

<table>
<thead>
<tr>
<th>Grade 1</th>
<th>Grade 2</th>
<th>Grade 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spanish I</td>
<td>Spanish II</td>
<td>Spanish III</td>
</tr>
<tr>
<td>Mathematics I</td>
<td>Mathematics II</td>
<td>Mathematics III</td>
</tr>
<tr>
<td>Science I (emphasis on biology)</td>
<td>Science II (emphasis on physics)</td>
<td>Science III (emphasis on chemistry)</td>
</tr>
<tr>
<td>Mexican and World Geography</td>
<td>History I</td>
<td>History II</td>
</tr>
<tr>
<td>---</td>
<td>Civics and Ethics I</td>
<td>Civics and Ethics II</td>
</tr>
<tr>
<td>Foreign Language I</td>
<td>Foreign Language II</td>
<td>Foreign Language III</td>
</tr>
<tr>
<td>Physical Education I</td>
<td>Physical Education II</td>
<td>Physical Education III</td>
</tr>
<tr>
<td>Technology I</td>
<td>Technology II</td>
<td>Technology III</td>
</tr>
<tr>
<td>State Subject</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Orientation and Tutoring</td>
<td>Orientation and Tutoring</td>
<td>Orientation and Tutoring</td>
</tr>
</tbody>
</table>

Within this framework, in 2009 a new study plan and programmes for primary education131 were established for the purpose of improving education quality through teacher training, updating study programmes and their contents, pedagogical focuses, and teaching methods and resources based on the educational competency model. See table 5 to analyse the primary education level's current and prior focuses.

---

131 The precedents of the primary education study plan and programmes were renewed beginning with the National Agreement for the Modernisation of Basic Education (ANMEB) in 1992 and have been subject to constant revision, among which is highlighted that which was done with the primary education Spanish programme in 2000 (SEP, 2009).
Table 5. Description of current and prior focuses at the primary education level

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Focus</td>
<td>Restrictions on Implementation</td>
<td>Focus</td>
</tr>
<tr>
<td>• Strengthening basic education contents 1</td>
<td>The need for updating based on current social, cultural and scientific changes</td>
<td>• Continuing lower secondary education study plan and programme approaches (2006)</td>
</tr>
<tr>
<td>• Emphasis on the mastery of reading and writing, elementary mathematics education and skills in the selection and use of information</td>
<td>Disconnecting the primary education study plan from pre-school and lower secondary education reforms</td>
<td>• Emphasis on developing skills</td>
</tr>
<tr>
<td>• Stimulation of the skills necessary for permanent learning</td>
<td>The need to renew learning content and new teaching strategies</td>
<td>• Curricular connection with other levels</td>
</tr>
<tr>
<td>• Acquisition of knowledge associated with the exercise of intellectual and reflective abilities</td>
<td></td>
<td>• Incorporation of themes that cover more than one subject</td>
</tr>
</tbody>
</table>

Basic contents consist of: 1) intellectual abilities (reading and writing, oral expression, the search for and selection of information and the application of mathematics to reality) that permit students to permanently and independently learn, as well as to act with efficacy and initiative, when faced with everyday situations; 2) the fundamental knowledge to understand natural phenomena, especially those related to health, environmental protection and the rational use of natural resources, as well as those that provide an organized view of Mexican history and geography; 3) ethical formation by means of the knowledge of their rights and duties and the implementation of values in their personal lives and in their relationships with others and as members of the national community; and 4) the development of attitudes that favour the appreciation and enjoyment of the arts, physical exercise and sports.

Four elements have been taken into consideration for the RIEB: the Pre-school Education and Secondary Education Reforms, innovation in school management, the use of information technologies and communication in educational projects (SEP, 2009). The goal of these efforts is to connect curricula among primary education and other basic education levels, to redefine educational materials, and to incorporate innovative educational and school management mechanisms in order to strengthen the activities carried out at this level. See table 6 to analyse the basic education curricular map proposed by the RIEB.
Table 6. Curricular map of basic education

<table>
<thead>
<tr>
<th>Learning Fields</th>
<th>Preschool</th>
<th>Primary</th>
<th>Secondary</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 2 3</td>
<td>1 2 3</td>
<td>4 5 6 1 2 3</td>
</tr>
<tr>
<td>Language and communication</td>
<td>Language and Communication</td>
<td>Spanish</td>
<td>Spanish I, II and III</td>
</tr>
<tr>
<td></td>
<td>State subject: additional language</td>
<td>State subject: additional language</td>
<td>Foreign Languages I, II and III</td>
</tr>
<tr>
<td>Mathematical thinking</td>
<td>Mathematical Thinking</td>
<td>Mathematics</td>
<td>Mathematics I, II and III</td>
</tr>
<tr>
<td>Exploration and comprehension of the natural and social worlds</td>
<td>Exploration and Knowledge of the World</td>
<td>Natural Sciences</td>
<td>Science I, II and III (emphasis on biology, physics and chemistry)</td>
</tr>
<tr>
<td></td>
<td>Physical Development and Health</td>
<td>Exploring the Place Where I Live</td>
<td>Technology I, II and III</td>
</tr>
<tr>
<td></td>
<td>Exploration of Nature and Society</td>
<td>Geography</td>
<td>History</td>
</tr>
<tr>
<td></td>
<td>History</td>
<td>State Subject</td>
<td>History I and II</td>
</tr>
<tr>
<td>Personal development and coexistence</td>
<td>Personal and Social Development</td>
<td>Civics and Ethics I</td>
<td>Civics and Ethics II</td>
</tr>
<tr>
<td></td>
<td>Artistic Expression and Appreciation</td>
<td>Physical Education</td>
<td>Physical Education I, II and III</td>
</tr>
<tr>
<td></td>
<td>Artistic Education</td>
<td>Artistic Education</td>
<td>Arts (Music, Dance, Theatre or Visual Arts)</td>
</tr>
</tbody>
</table>

In regard to the roles teachers play in the development and implementation of these study plans and programmes, they are considered fundamental agents in educational involvement; therefore, they must participate in proposals for initial training, updating and professional development in order to teach in an effective manner, to successfully apply new programmes in the classroom and to attend to the educational requirements that a diverse school population demands (SEP, 2009b). Curricular proposals demand that teachers exchange information inside specific academies, reach agreements with teachers from other groups and subjects and exchange aid in order to meet common goals. In order to implement these actions, teachers select the most adequate teaching strategies for developing the themes indicated in the subject programmes, beginning with specific context characteristics and using the teaching focuses and learning expected for each subject as fundamental references. In addition, they select the aid materials they consider necessary for attaining their goals — not only with respect to textbooks but also other series of available materials, such as classroom libraries and school video libraries (SEP, 2006a).

Together, the interaction fostered by teachers among students, the quality of the activities they propose, the comprehension and deep and creative mastery of subject and content focuses and the teaching resources used are the result of reflexive and innovative teaching practises. The task of teaching is developed as a flexible process with a great capacity for adaptability and creativity. It requires the establishment of networks that help teachers work more closely together and that permit them to exchange everyday experiences regarding contact with students in order to comment on one another's proposals and help one another out, to share success stories and stories of failure as permanent assessment and learning processes among pairs, and to define the trajectories for improving their work, beginning with these experiences (SEP-DGDC, 2010).
ANNEX D. THE SECRETARIAT OF PUBLIC EDUCATION

The Mexican government is made up of legislative, executive and judicial branches and it is governed by the Political Constitution of the United Mexican States, which was ratified in 1917 (CPEUM, 1917). Some of its articles have been reformed. The executive branch, together with the states, is responsible for managing education through the Secretariat of Public Education [SEP].

The SEP, one of the 19 Mexican secretariats that make up the federal government’s legal cabinet, is the authority in charge of education in Mexico. It assumed this responsibility as of its inception in 1921 and has created the necessary infrastructure in matters of policy, services and organisational structures in order to attain public education on a national scale (DOF, 16 June 2008).

The SEP carries out its activities in accordance with the objectives, strategies and priorities of the National Development Plan and the Education Sector Programme (Article 3 of the DOF, 11 October 2006). The following is a list of the SEP’s current objectives (DOF, 16 June 2008):

- To issue the pedagogical standards necessary for national basic and normal education in the terms of Article 3 of the Mexican Constitution and the General Education Law.
- To provide basic and normal education services in the Federal District.
- To advance, orient and, if necessary, promote early, indigenous, special and adult education at the upper secondary and tertiary levels that are necessary for Mexico’s development and in the terms of applicable legislation.
- To back scientific and technological research and promote its development and competitiveness in accordance with Mexico’s priorities.
- To advance and regulate the national system for the education, updating, training and betterment of basic education teachers.
- To establish the coordinative and participatory mechanisms necessary for the National Education System’s planning, programming and assessment.
- To guarantee the protection and dissemination of Mexican cultural, artistic, archaeological and historic heritage.
- To encourage cultural exchange with other countries and intervene in the creation of international cooperative programmes in matters of education, science, technology, art and culture.
- To ensure that the education provided by officially-authorized private schools adheres to Article 3 of the Mexican Constitution, the General Education Law and the standards issued by the SEP for such purpose.
- To guarantee the protection, oversight and registry of copyrights at the national and international levels in accordance with the Federal Copyright Law.
- To establish the mechanisms and instruments necessary for regulating professional performance in the terms of Article 5 of the Mexican Constitution.
- To promote the adequate and efficient use of the human, material and financial resources assigned to the SEP’s programmes, and to establish the means of favouring administrative modernization.
At the present time, the SEP is organised into central areas¹³² (or administrative units) and decentralised agencies¹³³. The mission and functions of each of these authorities are described in the SEP General Organization Manual (DOF, 16 June 2008), while the authorities of the secretary, undersecretaries, the administrative head, the head of the Educational Policy Planning and Assessment Unit [UPEPE], the coordinator of the Executive Coordinating Unit and the general and specific powers of the general directorates and other administrative units, of the decentralised agencies and of the head of the internal control agency of the SEP’s Interior Rules (DOF, 11 October 2006) The SEP’s organization chart may be consulted at http://www.sep.gob.mx/wb/sep1/sep1_Organigrama_SEP2.

The SEP regulates and provides public education services at the federal level. This is carried out by the agencies responsible for education at the state level. Currently, the federal government is responsible for standardising basic and normal education, defining guidelines, programming the school calendar, drafting plans and programmes through the Directorate General of Curricular Development [DGDC] and producing free textbooks through the Directorate General of Educational Materials [DGME], as well as for national planning and assessment (DOF, Articles 12 to 14, 22 June 2009; SEP, 2009°). Please consult tables 1 and 2 of this annex regarding the authorities of these directorates.

In turn, local education authorities are responsible for providing early, basic, special and normal education services, as well as training, updating and professional improvement for basic education teachers. In the Federal District’s case, basic and normal education services are handled by the federal SEP. In this manner, education services are granted by the federal government, state and municipal governments and autonomous and private institutions (DOF, 16 June 2008; SEP, 2009°).

In addition to federalising basic education, the SEP has transferred other upper secondary education services to local authorities: the professional technical services of the National College of Technical Professional Education [CONALEP] and the high school services of the Association of High Schools (DOF, 16 June 2008; SEP, 2009°). In this manner, upper secondary education services are still provided by the federal authority. Basic, upper secondary, tertiary and federal job education services are added to the services corresponding to these same levels and that already existed in the states. In this manner, state systems are strengthened and the SEP’s stewardship is consolidated, additionally maintaining standardisation and the balancing role that promotes the equitable growth of the National Education System, which is an important activity given the diversity and contrasts in the education progress of the nation’s 32 states.

For its operation, legal figures called Decentralised State Government Agencies [ODES] were created, which operated with state and federal financing. In addition, job education services and tertiary education services were transferred. These services were expanded based on a plan that coordinated local authorities and the federal government (DOF, 16 June 2008; SEP, 2008).

There are also public and private non-governmental organisations, institutions and agencies with education responsibilities or objectives related to the education sector and carry out teaching, research and assessment activities (See table 3 of this annex).

¹³² The central areas are the General Secretariat (consisting of seven authorities), the under secretariats of basic education, upper-secondary education and tertiary education (Each of these consists of five authorities.), the administrative head (made up of five areas) and the Educational Policy Planning and Assessment Unit (consisting of six authorities).
¹³³ The decentralised bodies are the National Polytechnic Institute, the National Council for Culture and Arts, the National Institute of Anthropology and History, the National Institute of Fine Arts and Literature, Educational Radio, the Federal Administration for Educative Services within Mexico City, the Commission of Sports Appeal and Refereeing, the National Copyrights Institute and the National Pedagogical University.
With regard to education financing, subject to the availability of revenue and the corresponding applicable public expenses, the executive branch and each state government take part in public education and education service financing (DOF, Articles 25 to 28, 22 June 2009). The expense for national education is the product of the public and private sectors’ budgeting efforts as well as those of the funds that come from external sources allocated to the financing of SEN activities.

In 2009, public expense made up 78.8% of educational financing. 63.1% was disbursed by the federal government, 15.5% by state governments and 0.2% by municipal governments. The private sector contributed 21.2% of the expense in education (SEP, 2009c).

The annual amount that the states and federal government — states and municipalities — allocate to public education expenses and education services cannot be less than 8% of Mexico’s GDP. At least 1% of the GDP must be allocated to scientific research and technological development in public tertiary education institutions. In 2009, 7.2% of the GDP was allocated to national education expenses. In 2008, public expense per student equalled 20 300 pesos and 21 600 in 2009 (pesos adjusted for inflation) (SEP, 2009c).

Regarding the budget’s allocation to each education level, continuity and concatenation are present among the levels so that the population attains the highest possible academic level (DOF, 16 June 2008, 22 June 2009).

The federal resources provided to each state are non-transferable and are applied exclusively to the provision of services and to other educational activities in each state. In this sense, the Directorate General of Budget Administration and Financial Resources is responsible for carrying out the activities required for managing the budget’s use, in adherence with the applicable standard. This permits transparency in expenses and ensures accountability (DOF, 16 June 2008, 22 June 2009).

134 Otherwise, the applicable legislation regarding administrative, civil and criminal liabilities will apply (DOF, 22 June 2009).
Table 1. Authorities of the Directorate General of Curricular Development

<table>
<thead>
<tr>
<th>Objective</th>
<th>Authorities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Its mission is to offer a basic education curriculum that is pertinent,</td>
<td>• To draft basic education study plans and programmes.</td>
</tr>
<tr>
<td>flexible, viable and constantly updated according to the social and</td>
<td>• To propose quality standards for the pedagogical process and the pedagogical</td>
</tr>
<tr>
<td>educational demands of Mexican children and young people and that takes</td>
<td>methods and focuses that are considered appropriate, as well as to assess</td>
</tr>
<tr>
<td>into consideration student, teacher and entity diversity, as well as the</td>
<td>student academic achievement at the different levels and modalities that</td>
</tr>
<tr>
<td>education system’s conditions. It focuses on the acquisition of basic</td>
<td>are applicable to basic education schools, together with the National</td>
</tr>
<tr>
<td>knowledge and permits students to develop the skills necessary for attaining</td>
<td>Institute for Education Assessment and Evaluation, the Directorate General</td>
</tr>
<tr>
<td>fulfilling personal and family lives, exercising a competent and engaged</td>
<td>of Policy Assessment and the other competent administrative units of the</td>
</tr>
<tr>
<td>citizenship, participating in productive work and continuing to learn</td>
<td>secretariat.</td>
</tr>
<tr>
<td>throughout life.</td>
<td>• To propose changes to the curriculum and to current pedagogical methods</td>
</tr>
<tr>
<td></td>
<td>and focuses after consulting with the competent administrative units of</td>
</tr>
<tr>
<td></td>
<td>the secretariat and with the corresponding specialized entities.</td>
</tr>
<tr>
<td></td>
<td>• To propose pedagogical guidelines and criteria that orient early</td>
</tr>
<tr>
<td></td>
<td>education study programmes.</td>
</tr>
<tr>
<td></td>
<td>• To propose guidelines for verifying the correct application of the</td>
</tr>
<tr>
<td></td>
<td>pedagogical standards regarding study plans and programmes, taking the</td>
</tr>
<tr>
<td></td>
<td>opinion of local education authorities into account and in coordination</td>
</tr>
<tr>
<td></td>
<td>with the competent administrative units of the secretariat and the</td>
</tr>
<tr>
<td></td>
<td>corresponding specialized authorities, as well as to propose guidelines</td>
</tr>
<tr>
<td></td>
<td>for verifying the correct application of the methods applied in early,</td>
</tr>
<tr>
<td></td>
<td>special and basic education schools.</td>
</tr>
<tr>
<td></td>
<td>• To propose the contents of free textbooks to the Directorate General of</td>
</tr>
<tr>
<td></td>
<td>Educational Materials, taking into consideration the opinions of local</td>
</tr>
<tr>
<td></td>
<td>authorities in education as well as those of the various social sectors</td>
</tr>
<tr>
<td></td>
<td>involved in education.</td>
</tr>
<tr>
<td></td>
<td>• To establish guidelines and provide consulting to local authorities in</td>
</tr>
<tr>
<td></td>
<td>education regarding the drafting of regional contents for study plans</td>
</tr>
<tr>
<td></td>
<td>and programmes and with respect to the application of pedagogical methods.</td>
</tr>
<tr>
<td></td>
<td>• To disseminate information that permits the comprehension of basic</td>
</tr>
<tr>
<td></td>
<td>education plan purposes to be ensured, as well as programmes and focuses</td>
</tr>
<tr>
<td></td>
<td>in coordination with the secretariat's competent administrative units,</td>
</tr>
<tr>
<td></td>
<td>heads of family and society.</td>
</tr>
<tr>
<td></td>
<td>• To propose the development of experimental projects in matters of content</td>
</tr>
<tr>
<td></td>
<td>for basic education to the Directorate General for the Development of</td>
</tr>
<tr>
<td></td>
<td>Education Management and Innovation.</td>
</tr>
<tr>
<td></td>
<td>• To maintain a registry of official study plans and programmes.</td>
</tr>
<tr>
<td></td>
<td>• To contribute to the development of the technical capacities of</td>
</tr>
<tr>
<td></td>
<td>state teams for the development of regional content.</td>
</tr>
<tr>
<td></td>
<td>• To develop programmes and actions to attend to the educational needs of</td>
</tr>
<tr>
<td></td>
<td>vulnerable groups in conjunction with the competent administrative units</td>
</tr>
<tr>
<td></td>
<td>and entities.</td>
</tr>
</tbody>
</table>

135 The Directorate General of Curricular Development resulted from the functional disaggregation of the sphere of design and the updating of educational plans, programmes and contents, as well as the drafting of materials — activities that had been carried out by the Directorate General of Educational Materials and Methods (DOF, 16 June 2008).
Table 2. Authorities of the Directorate General of Educational Materials

<table>
<thead>
<tr>
<th>Objective</th>
<th>Authorities</th>
</tr>
</thead>
</table>
| To contribute to elevating the quality of basic education through innovative proposals in educational methods and content, standards, criteria and quality standards for the production, selection, distribution and pedagogical use of educational materials and other teaching, curricular and complementary printed, audio-visual, computing and multimedia aids for the application of study plans and programmes. To contribute to the design and implementation of procedures for following up on and assessing the educational materials that serve as aids for the teaching and learning processes in which early, special and basic education teachers and students participate, at their different levels and in their different modalities. | • To design and edit free textbooks and keep them updated, beginning with the content provided by the Directorate General of Curricular Development, and to deliver them to the National Free Textbook Committee and authorize final versions for printing and distribution.  
• To propose rules, criteria and quality standards for the production, selection, distribution and pedagogical use of educational materials and other teaching, curricular and complementary aids for early, special and basic education, at the different levels and in the various modalities, for the purpose of aiding the work of teachers and students, taking into consideration the results of educational assessments and the observations of local authorities in education, schools and the social sectors involved in educational development.  
• To, in coordination with the Directorate General of Continuous Training for In-Service Teachers, develop and design didactic materials and aids for early, special and basic education, at the different levels and in the various modalities, for the purpose of aiding the work of teachers and students, taking into consideration the results of educational assessments and the observations of local authorities in education, schools and the social sectors involved in educational development.  
• To encourage and provide consulting during the process for drafting quality auxiliary didactic tools that are designed within the school environment using teacher experience and that are adapted to specific student and school conditions.  
• To promote the use of the auxiliary didactic tools and materials used in each region and that aid in taking advantage of early, special and basic education study plans and programmes, which, likewise, help students to understand their historical origins and geographic and environmental surroundings.  
• To design and produce auxiliary didactic tools and materials for audio-visual, computing, multimedia and other technological tools for the purpose of supporting early, special and basic education study plans and programmes at different levels and in different modalities in conjunction with the competent administrative units of the secretariat, agencies and corresponding entities.  
• To propose innovation in educational methods and content to the Directorate General of Curricular Development for the application of early, special and basic education study plans and programmes at different levels and in various modalities.  
• To provide consulting to local authorities in education regarding the drafting of regional educational materials and the application of pedagogical methods so that they are adequately taken advantage of.  
• To contribute to the development of technical capacities of state teams for the drafting, selection, distribution, dissemination and use of auxiliary didactic tools and materials.  
• To review and rule on requests for the authorization to use textbooks and other educational materials allocated to basic education in conjunction with the Directorate General of Curricular Development.  
• To propose guidelines for publishing the secretariat’s books and periodic editions in early, special and basic education matters in different modalities and for the exchange of educational publications with other institutions.  
• To establish rules and criteria for the regular provision of materials |

136 The Directorate General of Educational Materials was reorganised to strengthen the process for developing study plans and programmes and for producing teaching aids. It paved the way for two administrative units: the General Directorate of Educational Materials and the General Directorate of Curricular Development (DOF, 16 June 2008).
to classroom libraries and basic education school libraries and to
draft recommendations regarding the conditions of the equipment
and infrastructure necessary for the correct use of educational
materials in conjunction with the secretariat’s competent
administrative units.
• To propose the development of experimental projects in matters of
  content for basic education to the Directorate General for the
  Development of Educational Management and Innovation and the
  additional competent administrative units of the secretariat.
• To develop programmes and actions to attend to the educational
  needs of vulnerable groups in conjunction with the competent
  administrative units and entities.
• To design and place into operation procedures and methods for
  following up on the use of basic education materials so that they
  remain up to date, together with the secretariat’s competent
  administrative units, local authorities in education, schools and the
  social sectors involved in educational development.
Report of Basic Education Assessment Practices in Mexico, 2010

Table 3. Some agencies with educational responsibility in the SEN

<table>
<thead>
<tr>
<th>Agency, Institution or Non-Governmental Organization</th>
<th>Objective</th>
<th>Type of Responsibility</th>
<th>Web Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Centre for Educational Studies (CEE)</td>
<td>A non-profit, independent academic institution committed to seeking and promoting justice, freedom and democracy through education, specifically education directed to the least-favoured populations.</td>
<td>Research Assessment</td>
<td><a href="http://www.cee.edu.mx/">http://www.cee.edu.mx/</a></td>
</tr>
<tr>
<td>National Assessment Centre for Higher Education (CENEVAL)</td>
<td>A non-profit association whose main activity is the design and application of instruments for assessing knowledge, skills and competencies, as well as for analysing and disseminating test results.</td>
<td>Research Assessment</td>
<td><a href="http://www.ceneval.edu.mx/">http://www.ceneval.edu.mx/</a></td>
</tr>
<tr>
<td>Centre for Research and Teaching of Economics (CIDE)</td>
<td>A research and tertiary education centre specialised in social sciences, whose purpose is to contribute to Mexico's development through the generation of rigorous and relevant knowledge and the creation of a new generation of leaders who are capable of conducting themselves with creativity and responsibility in an open and competitive world.</td>
<td>Research Assessment</td>
<td><a href="http://www.cide.mx/">http://www.cide.mx/</a></td>
</tr>
<tr>
<td>Latin American Institute for Educational Communication (ILCE)</td>
<td>A regional organization dedicated to exploring technological possibilities and the role of the media in education, as well as derivations of communication theory in the learning process. It meets its goals through research and development projects regarding aspects linked to institutional themes: communication and technology applied to education in general and distance education in specific.</td>
<td>Research Development</td>
<td><a href="http://www.ilce.edu.mx/">http://www.ilce.edu.mx/</a></td>
</tr>
<tr>
<td>National Institute for Education Assessment and Evaluation (INEE)</td>
<td>A governmental agency whose task is to offer education authorities and the private sector tools for assessing education systems with respect to basic education (pre-school, primary and secondary) and upper secondary education.</td>
<td>Research Assessment</td>
<td><a href="http://www.inee.edu.mx/">http://www.inee.edu.mx/</a></td>
</tr>
<tr>
<td>National Polytechnic Institute [IPN]*</td>
<td>A public tertiary education institution that is at the forefront of technological education and technological research. It provides educational alternatives to all social sectors, specifically to the least-favoured sectors.</td>
<td>Education Research</td>
<td><a href="http://www.ipn.mx/">http://www.ipn.mx/</a></td>
</tr>
<tr>
<td>National Autonomous University of Mexico (UNAM)</td>
<td>A public tertiary education institution whose mission is to create professionals who are of use to society, to organize and carry out research that mainly deals with national conditions and problems and to extend cultural benefit to the highest degree possible.</td>
<td>Research Assessment</td>
<td><a href="http://www.unam.mx/">http://www.unam.mx/</a></td>
</tr>
<tr>
<td>National Pedagogical University (UPN)*</td>
<td>A public tertiary education institutions whose goal is to create undergraduate and postgraduate professionals in education in order to attend to the National Education System’s needs as well as the general needs of Mexican society. It also conducts education research.</td>
<td>Education Research</td>
<td><a href="http://www.upn.mx/">http://www.upn.mx/</a></td>
</tr>
</tbody>
</table>
### Agency, Institution or Non-Governmental Organization

<table>
<thead>
<tr>
<th>Objective</th>
<th>Type of Responsibility</th>
<th>Web Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mexican autonomous universities</td>
<td>Education</td>
<td><a href="http://www.uaa.mx/">http://www.uaa.mx/</a></td>
</tr>
<tr>
<td></td>
<td>Research</td>
<td><a href="http://www.uabc.mx/">http://www.uabc.mx/</a></td>
</tr>
<tr>
<td></td>
<td>Assessment</td>
<td><a href="http://www.udg.mx">http://www.udg.mx</a></td>
</tr>
<tr>
<td></td>
<td>Assessment</td>
<td><a href="http://www.uady.mx/">http://www.uady.mx/</a></td>
</tr>
<tr>
<td>Mexican private universities</td>
<td>Education</td>
<td><a href="http://www.itesm.mx/">http://www.itesm.mx/</a></td>
</tr>
<tr>
<td></td>
<td>Research</td>
<td><a href="http://www.anahuac.mx/">http://www.anahuac.mx/</a></td>
</tr>
<tr>
<td></td>
<td>Assessment</td>
<td><a href="http://www.uia.mx/">http://www.uia.mx/</a></td>
</tr>
<tr>
<td></td>
<td>Assessment</td>
<td><a href="http://www.ula.mx/">http://www.ula.mx/</a></td>
</tr>
<tr>
<td></td>
<td>Assessment</td>
<td><a href="http://www.up.mx/">http://www.up.mx/</a></td>
</tr>
</tbody>
</table>

*Decentralised agencies of the SEP*
### ANNEX E. TIMELINE FOR THE ASSESSMENT OF BASIC EDUCATION IN MEXICO

<table>
<thead>
<tr>
<th>Period</th>
<th>First Year</th>
<th>Actions and/or Assessment Practises</th>
<th>Responsible Agency</th>
<th>Assessment Subject/Field of Application</th>
<th>Currently in Force</th>
</tr>
</thead>
<tbody>
<tr>
<td>First period</td>
<td>1970</td>
<td>Collection of census information for the generation of SEN statistics</td>
<td>DGPPP-SEP</td>
<td>SEN</td>
<td>Yes (911 format)</td>
</tr>
<tr>
<td></td>
<td>1972</td>
<td>Creation of the Department of Qualitative Education Studies</td>
<td>SEP</td>
<td>--</td>
<td>Now, the DGEPE</td>
</tr>
<tr>
<td></td>
<td>1973</td>
<td>Assessment of learning aptitudes of students finishing primary school</td>
<td>SEP</td>
<td>Students</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>1973</td>
<td>New regulations for the Vertical Promotion System [EV]</td>
<td>SEP</td>
<td>Teachers</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>1974</td>
<td>The Department of Qualitative Education Studies becomes the Undersecretariat of Assessment and Accreditation.</td>
<td>SEP</td>
<td>--</td>
<td>Now, the DGEPE</td>
</tr>
<tr>
<td></td>
<td>1974</td>
<td>Application of the Lower Secondary Education Entrance Exam</td>
<td>SEP</td>
<td>Students</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>1976-1982</td>
<td>Assessment project for the academic performance of primary school grades four and five students</td>
<td>SEP</td>
<td>Students</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>1984</td>
<td>The Undersecretariat of Assessment and Accreditation becomes the Directorate General of Assessment</td>
<td>SEP</td>
<td>--</td>
<td>Now, the DGEPE</td>
</tr>
<tr>
<td></td>
<td>1984</td>
<td>Application of the Normal Education Entrance Exam [EIEN]</td>
<td>DGE-SEP</td>
<td>Students</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>1989</td>
<td>Substitution of the EIEN for the Diagnosis and Classification Instrument for Normal School Enrolment [IDCIEN]</td>
<td>DGE-SEP</td>
<td>Students</td>
<td>Yes</td>
</tr>
<tr>
<td>Second period</td>
<td>1990</td>
<td>First efforts to promote voluntary self-assessment in basic education schools</td>
<td>DGE-SEP</td>
<td>Schools</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>1991-1995</td>
<td>Assessment of the Programme to Reduce Educational Lag [PARE]</td>
<td>DGE-SEP</td>
<td>Students</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>1992</td>
<td>Signing of the ANMEB</td>
<td>Federal government, SEP and SNTE</td>
<td>--</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>1992</td>
<td>Creation of the National Teaching Career Programme [PNCM] implemented in 1994. First experience with systematically assessing teachers that evaluated the professional preparation of and extent to which students took advantage of school.</td>
<td>DGE-SEP</td>
<td>Teachers</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>1993</td>
<td>LGE decree establishing that SEN assessment corresponds to the SEP</td>
<td>Federal government</td>
<td>--</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>1993</td>
<td>Creation of the Children’s Knowledge Olympics</td>
<td>DGE-SEP</td>
<td>Students</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>1994</td>
<td>Assessment of the Program to Reduce Lag in Basic Education [PAREB]</td>
<td>DGE-SEP</td>
<td>Students</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>1994</td>
<td>Signing of Resolution 200</td>
<td>SEP</td>
<td>Students</td>
<td>Partial</td>
</tr>
<tr>
<td></td>
<td>1994</td>
<td>Creation of the CENEVAL</td>
<td>CENEVAL</td>
<td>Students</td>
<td>Yes</td>
</tr>
<tr>
<td>Year</td>
<td>Description</td>
<td>Organization(s)</td>
<td>Type</td>
<td>Conclusion</td>
<td></td>
</tr>
<tr>
<td>--------</td>
<td>------------------------------------------------------------------------------</td>
<td>-----------------</td>
<td>----------</td>
<td>------------</td>
<td></td>
</tr>
<tr>
<td>1995</td>
<td>Mexico’s participation in the TIMSS</td>
<td>IEA, SEN</td>
<td></td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>1996-2000</td>
<td>Primary Education Assessment Program (EVEP)</td>
<td>DGE-SEP</td>
<td>Students</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>1996-2003</td>
<td>Development of national standard exams</td>
<td>DGE-SEP</td>
<td>SEN</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>1996</td>
<td>Mexico’s participation in Latin American Laboratory for Assessment of the Quality of Education’s [LLECE] regional and comparative study</td>
<td>OREALC/UNESCO</td>
<td>SEN</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>1997</td>
<td>First application of the ENAMS</td>
<td>DGFCMS-SEP</td>
<td>Teachers</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>1997</td>
<td>Mexico’s participation in the PISA (first application in 2000)</td>
<td>OECD, SEN</td>
<td></td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>2001</td>
<td>First assessment of the Quality Schools Programme (PEC)</td>
<td>DGE-SEP</td>
<td>Programmes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>2002</td>
<td>Creation of the INEE</td>
<td>Federal government</td>
<td>SEN</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>2002</td>
<td>The Directorate General of Assessment becomes the Directorate General of Policy Assessment [DGEP]</td>
<td>SEP</td>
<td>--</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>2002-2007</td>
<td>Development and adaptation of proposals to promote school self-assessment</td>
<td>DGEP-SEP</td>
<td>Schools</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>2003</td>
<td>Development of a system of educational indicators</td>
<td>SEP and INEE</td>
<td>SEN</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>2003</td>
<td>The INEE takes responsibility for National Standards Tests</td>
<td>INEE</td>
<td>Learning</td>
<td>No</td>
<td></td>
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<tr>
<td>2003-2005</td>
<td>Development of Excale (first applied in 2005)</td>
<td>INEE</td>
<td>Learning and SEN</td>
<td>Yes</td>
<td></td>
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<tr>
<td>2005</td>
<td>Development of the ENLACE test (first applied in 2006)</td>
<td>DGEP</td>
<td>Students</td>
<td>Yes</td>
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<tr>
<td>2005</td>
<td>Creation of the CONEVAL</td>
<td>CONEVAL</td>
<td>Programmes</td>
<td>Yes</td>
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<tr>
<td>2007</td>
<td>Development of school studies</td>
<td>INEE</td>
<td>Schools</td>
<td>Yes</td>
<td></td>
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<tr>
<td>2007</td>
<td>Annual assessment of federal public administration programmes</td>
<td>CONEVAL</td>
<td>Programmes</td>
<td>Yes</td>
<td></td>
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<tr>
<td>2008</td>
<td>Mexico’s participation in the TALIS</td>
<td>OECD</td>
<td>Teachers</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>2009</td>
<td>Signing of Resolution 499, which modified two articles of Resolution 200.</td>
<td>SEP</td>
<td>Students</td>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>
ANNEX F. ASSESSMENT STANDARDS

General Education Law (DOF, 22 June 2009)

CHAPTER II
EDUCATIONAL FEDERALISM
Section 1. Distribution of the role of social education

ARTICLE 12. The following roles exclusively correspond to the federal education authority:

VI. To regulate a national system of continuous education and professional betterment of basic education teachers in service.

XI. To execute the global planning and programming of the national education system, to assess it and to establish the general guidelines for the assessment that local authorities in education must carry out.

ARTICLE 13. The following roles exclusively correspond to local authorities, within their corresponding spheres of competence:

I. To provide early, basic (including indigenous), special and normal education, as well as additional education, for teachers.

IV. To provide teaching, updating, training and professional improvement services for basic education teachers in accordance with the general provisions established by the secretariat.

V. To revalidate and grant primary, lower secondary, normal and other equivalency studies for the education of basic education teachers according to the general guidelines issued by the secretariat.

ARTICLE 14. In addition to the exclusive authorities indicated in Articles 12 and 13, the following authorities correspond to federal and local educational authorities, in a concurrent manner:

VII. To permanently promote research that serves as a foundation for innovation in education.

Section 4. Assessing the National Education System

ARTICLE 29. The Secretariat is responsible for assessing the National Education System, independently of what local authorities in education do in within their corresponding spheres of competence.

Such assessment, and that of local authorities in education, is systematic and permanent. The results are used as the basis for authorities in education, within their sphere of competence, to adopt the necessary measures.

ARTICLE 30. State-established education institutions will grant authorities in education all aid and collaboration for the assessment indicated in this section through their decentralised agencies and through private agencies with the authority or with official validation.

For this purpose, they will timely provide all information required of them; take the steps that permit effective collaboration among students, teachers, directors and other participants in education processes; and aid authorities in education, including the secretariat, to conduct statistical and diagnostic exams and directly collect the necessary information from schools.

Notwithstanding the foregoing paragraphs, the institutions indicated in this Article will be obligated to provide indicators of their progress in applying methods for preventing and eliminating any form of violence and discrimination so that they are subject to assessment in the matter. Such indicators will be public and will be disseminated by means of the available media.
ARTICLE 31. The authorities in education will inform teachers, students, heads of family and society in general of the results of the assessments conducted, as well as the additional global information that permits a measurement of the development and progress in education in each state.

CHAPTER IV
THE EDUCATION PROCESS

Section 2. Study Plans and Programmes

ARTICLE 47. Educational contents will be defined in study plans and programmes.

The following must be established in study plans:

IV. The assessment and accreditation criteria and procedures for verifying whether students comply with the objectives of each education level.

The specific learning goals for subjects and other learning units in the study plan must be established in study programmes, as well as the criteria and procedures for assessing and accrediting compliance. These may include suggestions regarding the methods and activities for meeting such goals.

ARTICLE 48. The secretariat will determine the study plans and programmes that are applicable to and obligatory throughout Mexico for primary, lower secondary, normal and basic teacher education. The secretariat will carry out systematic and continuous reviews and assessments on the plans and programmes indicated in this Article in order to keep them permanently updated.

ARTICLE 50. Student assessment will include the individual measurement of knowledge, abilities, skills and the general achievement of the goals established in the study plans and programmes.

Institutions must periodically inform students and, if necessary, heads of family or tutors, of results and grades obtained on partial and final exams, as well as the observations regarding student academic performance that allows students to take better advantage, if these observations exist.
ANNEX G. ADMINISTRATIVE UNITS OF THE SEP AND INEE

A) Administrative Units of the SEP

The head of the UPEPE is responsible for the following (DOF, Article 8, 11 October 2006):

- Development, integration and dissemination of the information that is necessary for the planning, programming and assessment of the education sector, as well as the establishment of the corresponding indicators.
- Coordination of the planning and assessment of strategic programmes and policies in consultation with the secretariat’s decentralised agencies and administrative units and with education sector entities.
- Development and coordination of the National Educational Assessment System in consultation with federal entities, specialised entities and competent administrative units.

The following agencies report to the UPEPE: the Directorate General of Policy Assessment [DGEP], the Directorate General for Planning and Programming [DGPP], the Directorate General of Accreditation, Incorporation and Revalidation [DGAIR] and the National Coordination of the Teaching Career [CNCM]. These administrative units carry out the specific assessment duties indicated in the SEP organization manual (DOF, 16 June 2008):

a) DGEP. It is in charge of systematically and permanently assessing the SEN's development, together with the secretariat’s administrative units and competent specialised entities, as well as of compliance with established policies, objectives, programmes, projects, activities and commitments and their impacts.

b) DGPP. Its purpose is to develop an educational statistical information system at the national level; to promote the use of data derived from this system among educational players and society in general; and to establish guidelines and coordinate the dissemination of education sector information, statistics and indicators.

c) DGAIR. It is responsible for accrediting and certifying the knowledge and aptitudes acquired through the SEN in coordination with different competent local authorities in education and various authorities, as well as for issuing, as the case may be, the ensuing certificates, degrees and grades for which it establishes and disseminates the corresponding standards.

d) CNCM. It is responsible for promoting the professionalization of the teachers who voluntarily participate in the National Teaching Career Programme at the federal and state levels. As part of its duties, it uses the results of the assessments carried out by the DGEP and participates in the continuous improvement of the procedures for assessing the professional preparation of teachers.

It is worth pointing out that its participation in matters of assessment is subject to the approval of the SEP-SNTE National Committee, state joint committees and assessment bodies at each work centre.

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e) The following are the DGEP roles, in conjunction with the corresponding authorities (DOF, Article 40, 11 October 2006):

- In charge of systematically and permanently assessing the National Education System's development, together with the secretariat’s administrative units and competent specialised entities, as well as of compliance with established policies, objectives, programmes, projects, activities and commitments established in the National Education Programme, as well as their impacts.

- To develop and coordinate mechanisms for assessing the quality and effectiveness of the National Education System along with administrative units and competent specialised authorities.

- To assess the correct investment of public resources made by the secretariat, as well as the results of the policies and activities to which they have been assigned and, if necessary, to propose the ensuing corrective measures.

- To propose national policy for assessing education in conjunction with the competent authorities.

- To contribute to the development and coordination of the national educational assessment system.

- To propose policies for national participation in international studies and programmes oriented toward the determination and use of statistical information and educational indicators in coordination with the corresponding authorities.

- To analyse the criteria for assessing educational programmes, procedures and the necessary instruments in order to obtain the parameters that permit assessment of individual academic performance by subject, grade, level and type of education, as well as those corresponding to teacher performance, contributing, as the case may be, to their development and application. This is done in coordination with local authorities in education, the INEE and other specialised authorities and competent administrative units.

- To propose the general assessment guidelines that the local authorities in education must carry out, in conjunction with specialised entities and competent administrative units.

- To propose the policies, priorities, programmes and strategic actions derived from the assessment of development in national education, including those related to funding, certification and quality accreditation and the search for alternatives to continuous education and non-schooled education.

The DGAIR has the following powers (DOF, Article 41, 11 October 2006):

- To accredit and certify the knowledge and aptitudes acquired through the National Education System, issuing, as the case may be, the ensuing certificates, degrees and grades. This is done in coordination with the secretariat's administrative units, decentralised agencies and public-sector entities and the competent local authorities in education.

- To establish and disseminate the standards for academic control and the knowledge and aptitudes acquired through the National Education System and verify compliance with them in coordination with administrative units and competent entities.

- To assess the provision of educational service in private schools that function under the authorisation or acknowledgment of the official validity of studies granted by the secretariat.

The DGPP’s powers are (DOF, Article 39, 11 October 2006):

- To develop a national information, statistic and educational indicator system related to the planning, programming and assessment of the education system in conjunction with the National Institute for Education Assessment and Evaluation, the Directorate General of Policy Assessment and other competent administrative units.
Within the sphere of basic education assessment, the UPEPE carries out its duties in coordination with the Undersecretariat of Basic Education [SEB] and its directorates: the Directorate General of Curricular Development [DGDC], the Directorate General of Educational Materials [DGME], the Directorate General for the Development of Education Management and Innovation [DGDGIE], the Directorate General of Indigenous Education [DGEI] and the Directorate General of Continuous Training for In-Service Teachers [DGFCMS]. The powers of these authorities in matters of assessment are indicated below (DOF, 16 June 2008):

a) DGDC. It is responsible for the design of basic education curricula and study programmes, as well as for the assessment of and follow-up on how educational content is applied in the classroom and in school.

b) DGME. It is responsible for the design and implementation of procedures for following up on and assessing educational materials that support the teaching and learning processes in which basic education teachers and students participate. Using educational materials, procedures for teachers to carry out in-classroom assessment are also proposed in accordance with LGE-established guidelines, the secretariat’s resolutions and applicable study plans and programmes.

c) DGDGIE. Among its duties are the establishment of guidelines for planning, following up on, assessing and developing new models of institutional management that are centred on schools; the proposal of performance standards; the promotion and replication of educational innovations in schools; and the encouragement of self-assessment processes in schools.

d) DGEI. It is in charge of proposing, adapting, updating, disseminating and verifying the use of instruments for assessing learning in indigenous education, taking care that they have an intercultural and bilingual orientation that ensures the complete education of students pertaining to different ethnic groups.

e) DGFCMS. It proposes the criteria and procedures for the accreditation and validation of studies derived from programs, projects and actions regarding the continuous training of in-service teachers in coordination with the SEP’s competent administrative units.

The DGDC’s powers are (DOF, Article 29, 11 October 2006):

• To draft basic education study plans and programmes.

• To propose quality standards for the pedagogical process and the pedagogical methods and focuses considered appropriate, as well as to assess the academic achievement of students at different levels and modalities applicable to basic education schools in coordination with the National Institute for Education Assessment and Evaluation, the Directorate General of Policy Assessment and other competent administrative units of the secretariat.

• To propose guidelines for verifying the correct application of pedagogical standards and standards regarding study plans and programmes, as well as the methods applied in early, special and basic education schools, taking into consideration the opinion of local authorities in education and in coordination with the competent administrative units of the secretariat and the corresponding specialised authorities.

The DGME’s powers are (DOF, Article 30, 11 October 2006):

• To propose standards, criteria and quality standards for the production, selection, distribution and pedagogical use of educational materials and other didactic, curricular and complementary aids for early, special and basic education, at their different levels and in their different modalities, for the purpose of aiding the work of teachers and students and considering the results of educational assessments and the observations of local authorities in education, schools and the social sectors involved in educational development.

The DGDGIE’s powers are (DOF, Article 31, 11 October 2006):

• To propose and update performance standards for early, special and basic education schools at all levels and in all modalities in coordination with local authorities in education and the competent administrative units of the secretariat.
To encourage school self-assessment processes in coordination with the National Institute for Education Assessment and Evaluation, the Directorate General of Policy Assessment, other competent administrative units of the secretariat, specialised authorities, local authorities and schools.

To promote the development and use of research and assessment for improving early, special and basic education schools at their different levels and in their different modalities in coordination with local authorities in education and specialised authorities and competent administrative units of the secretariat.

To disseminate the results of assessments and research carried out in the context of basic education and to promote feedback on and the development of educational policies pertaining to early, special and basic education in coordination with the National Institute for Education Assessment and Evaluation, the Directorate General of Policy Assessment and the corresponding specialised authorities.

To promote the creation of performance standards for school directors, supervisors and technical support staff in collaboration with the competent administrative units of the secretariat and local authorities in education.

The DGEI’s powers are (DOF, Article 32, 11 October 2006):

- To verify compliance with pedagogical standards, contents, study plans and programmes, methods, didactic materials and aids and instruments for assessing learning that are approved for teaching in indigenous education, along with the participation of local authorities in education and in coordination with the competent administrative units of the secretariat.

- To experimentally apply pedagogical standards, study plans and programmes, contents, methods, didactic materials and aids and instruments for assessing learning in indigenous education in coordination with the Directorate General of Curricular Development.

The DGFCMS’s powers are (DOF, Article 33, 11 October 2006):

- To propose the criteria and procedures for the accreditation and validation of studies derived from programs, projects and actions regarding the continuous training of in-service teachers in coordination with the SEP’s competent administrative units.

B) National Institute for Education Assessment and Evaluation [INEE]

The National Institute for Education Assessment and Evaluation is a decentralised public agency with a technical nature, legal personality and its own assets (DOF, Article 1, 8 August 2002). It was created by a presidential decree on 8 August 2002. Its mission is to contribute to the improvement of education by means of the full assessment of SEN quality and the factors that determine this quality, as well as the transparent and timely dissemination of results in order to aid in decision-making, pedagogical improvement to schools and accountability (INEE, 2006).

The INEE’s goal is to offer federal, local and private authorities in education the ideal tools for assessing the various elements that constitute their corresponding education systems. The goal of the institute’s programmes, services and actions is basic education at the pre-school, primary and lower secondary levels and high school and professional upper secondary education in the academic modality, in urban and rural public and private schools and in non-schooled and mixed modalities, including adult, special, indigenous and community education. The INEE’s activities do not cover tertiary education (DOF, Article 2, 8 August 2002). In order to comply with its objectives, the INEE collaborates with the SEP on the assessments that the SEP must conduct regarding the SEN and with respect to the establishment of the general guidelines pursuant to which local authorities in education must assess their corresponding education systems. In this manner, the INEE must:

I. Develop and maintain in operation a system of indicators that permits objective assessment of the National Education System’s quality, at the corresponding levels.

II. Aid in the realisation of national assessments on student learning using sampling or a census, and in annual or multiannual cycles, for all grades, cycles and curricular areas of the corresponding educational modalities and levels.
I. Develop models for assessing schools regarding the educational types, levels and modalities of its competence and aid in their use in the National Education System.

II. Upon the request of the corresponding state authorities, support the extension of the educational assessment indicated in the three foregoing sections in Mexican states.

III. Upon the request of federal or state authorities in education, support the assessment of priority programmes and projects.

IV. Design instruments and adequate systems for assessing the different types, levels, grades and areas of curricula; aid in their application or, if necessary, supervise application; and aid in the analysis and interpretation of the information they provide, always acting with respect for the principle of fairness.

V. Promote and strengthen a culture of assessment in all media related to education, disseminate the results of analyses and develop training activities in matters of educational assessment.

VI. Carry out studies and research in the matter; represent Mexico before international educational assessment agencies; and coordinate the country’s participation in related international projects, using the participation that corresponds to the Ministry of Foreign Affairs according to legal provisions.

In carrying out its duties, the INEE seeks to contribute to the improvement of education within the framework of the principles that establish the Political Constitution of the United Mexican States and the General Education Law. The INEE’s powers are (DOF, Article 5, 8 October 2002):

I. To define and implement a national assessment policy that contributes to an increase in educational quality, together with the Secretariat of Public Education. The national educational assessment policy must specify:

   a) The reference points with which the results obtained must be compared in order to arrive at value judgments regarding educational quality, from a transverse and longitudinal perspective.

   b) The consequences of assessment in terms of compensatory aid, stimuli, preventive or corrective measures and financing.

   c) Matters related to the public dissemination of assessment results, caring for individual rights to privacy and society’s right to be provided accountability regarding the use of public resources and the function of general interest services.

   d) The distinction among the assessment of individuals, institutions and subsystems and the SEN as a whole.

II. To consult the federal executive branch regarding the planning of policies and actions related to educational quality in accordance with the National Development Plan.

III. To act as an advisory agency for the Federal Public Administration’s entities and dependencies, as well as for state and municipal authorities and social and private sectors, when required.

IV. To promote actions for improving educational quality in coordination with the Secretariat of Public Education, other entities of the Federal Public Administration and private entities within their respective spheres of competence.

V. To arrange agreements with state and municipal authorities in education and, if necessary, with private entities in order to promote policies and programmes aimed at improving educational quality.
The assessments conducted by the INEE are diagnostic in nature, and not summative, given that they correspond to federal and state authorities in education (DOF, 8 August 2002; INEE, 2006), which implies that the INEE does not conduct national exams with a formal civil effect on students. One manner in which the INEE assesses the SEN is through student learning in certain academic subjects and grades, for which it was necessary to draft an assessment plan, as well as the instruments to become validly and truthfully familiar with academic achievement (Backhoff, Andrade, Sánchez, Peon and Bouzas, 2006). The foregoing is made concrete in the General Learning Assessment Plan, INEE (PGEA), which includes the creation of a new generation of national tests. The PGEA defines the academic subjects and grades that the INEE will assess, as well as the 2005-2016 programme for applying this new generation of tests (Backhoff and Díaz, 2005).
ANNEX H. OVERVIEW OF BASIC EDUCATION ASSESSMENT AT THE STATE LEVEL

Table 1. Legal framework, responsibilities and assessment type

<table>
<thead>
<tr>
<th>States</th>
<th>Assessment of Education in Local Legislation in Education</th>
<th>Autonomous Assessment Institute</th>
<th>In-house Assessments at the State Level(^1)</th>
<th>Sphere of Assessment(^1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGUASCALIENTES*</td>
<td>•</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BAJA CALIFORNIA*</td>
<td>•</td>
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<td></td>
</tr>
<tr>
<td>BAJA CALIFORNIA SUR*</td>
<td>•</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAMPECHE</td>
<td>•</td>
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<tr>
<td>CHIAPAS</td>
<td>•</td>
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<tr>
<td>CHIHUAHUA</td>
<td>•</td>
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<td></td>
</tr>
<tr>
<td>COAHUILA*</td>
<td>•</td>
<td>•</td>
<td>Learning</td>
<td></td>
</tr>
<tr>
<td>COLIMA*</td>
<td>•</td>
<td>•</td>
<td>Learning</td>
<td></td>
</tr>
<tr>
<td>DURANGO</td>
<td>•</td>
<td>•</td>
<td>Teachers</td>
<td></td>
</tr>
<tr>
<td>STATE OF MEXICO*</td>
<td>•</td>
<td>•</td>
<td>Teachers, sector heads and supervisors</td>
<td></td>
</tr>
<tr>
<td>GUANAJUATO*</td>
<td>•</td>
<td>•</td>
<td>Teachers, sector heads and supervisors</td>
<td></td>
</tr>
<tr>
<td>GUERRERO</td>
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<tr>
<td>JALISCO*</td>
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<td>•</td>
<td>Learning, teachers, programmes</td>
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<td>MORELOS*</td>
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<td>NAYARIT</td>
<td>•</td>
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<tr>
<td>NUEVO LEON*</td>
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<td>•</td>
<td>Learning</td>
<td></td>
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<tr>
<td>OAXACA</td>
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<td>PUEBLA*</td>
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<td>QUERETARO</td>
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<td>Learning</td>
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<td>Learning</td>
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<td>SAN LUIS POTOSI</td>
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<td>SINALOA*</td>
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<td>SONORA**</td>
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<td>ZACATECAS*</td>
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<td>Learning</td>
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</table>

\(^1\)This information was obtained using the information expressly provided for this report by the secretariats of education of such states. For more information, see the methodology for drafting this report in the introduction. The remainder of the information was obtained from the SEP-UPEPE (2010b). Note: For the 15 entities marked with an asterisk (*), information was expressly received for this report by the secretariats of education of such states. In the case of Sonora (**), information was obtained by online searches.
Table 2. State participation in national and international tests

<table>
<thead>
<tr>
<th>State</th>
<th>Tests that Apply at the National Level</th>
<th>International Assessments in which Mexico Participates</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Exscale</td>
<td>ENLACE</td>
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<td>BAJA CALIFORNIA</td>
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<td>X</td>
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<td>BAJA CALIFORNIA SUR</td>
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<td>CAMPECHE</td>
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<td>FEDERAL DISTRICT</td>
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<td>x</td>
<td>X</td>
</tr>
<tr>
<td>SAN LUIS POTOSI</td>
<td>x</td>
<td>X</td>
</tr>
<tr>
<td>SINALOA</td>
<td>x</td>
<td>X</td>
</tr>
<tr>
<td>SONORA</td>
<td>x</td>
<td>X</td>
</tr>
<tr>
<td>TABASCO</td>
<td>x</td>
<td>X</td>
</tr>
<tr>
<td>TAMAULIPAS</td>
<td>x</td>
<td>X</td>
</tr>
<tr>
<td>TLAXCALA</td>
<td>x</td>
<td>X</td>
</tr>
<tr>
<td>VERACRUZ</td>
<td>x</td>
<td>X</td>
</tr>
<tr>
<td>YUCATAN</td>
<td>x</td>
<td>X</td>
</tr>
<tr>
<td>ZACATECAS</td>
<td>x</td>
<td>X</td>
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</tbody>
</table>

Table 3. Efforts/proposals for educational assessment in the state sphere*

<table>
<thead>
<tr>
<th>State</th>
<th>Sphere of Assessment</th>
<th>Name</th>
<th>Objective</th>
<th>Beginning and Periodicity</th>
<th>Currently in Force</th>
<th>Demographic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coahuila</td>
<td>Learning</td>
<td>Diagnostic of Primary Education Grades Four, Five and Six</td>
<td>To assess the cognitive situation and that of the abilities obtained by students in the previous school year and to have diagnostic elements for the current school year.</td>
<td>2003 (annual)</td>
<td>Yes</td>
<td>Census of primary education school students from grades four to six (approximately 170,000 students in three grades). Applied at the beginning of the school year.</td>
<td><a href="http://www.sepc.gob.mx/">http://www.sepc.gob.mx/</a></td>
</tr>
<tr>
<td></td>
<td>Learning</td>
<td>Semester Exam for Primary Education Grades Three, Four and Five</td>
<td>To assess the cognitive situation and that of the abilities obtained by students in the middle of the school year.</td>
<td>2003 (annual)</td>
<td>Yes</td>
<td>Census of primary school students from grades three to five (approximately 160,000 students in three grades). Applied at the end of January or beginning of February.</td>
<td><a href="http://www.sepc.gob.mx/">http://www.sepc.gob.mx/</a></td>
</tr>
<tr>
<td>Colima</td>
<td>Learning</td>
<td>End-of-Course Exam at the Entity’s Level</td>
<td>To become familiar with the advantages taken by basic education students at the end of the school year.</td>
<td>1998 (annual)</td>
<td>Yes</td>
<td>Basic education schools</td>
<td><a href="http://www.secolima.gob.mx/">http://www.secolima.gob.mx/</a></td>
</tr>
<tr>
<td>State of Mexico</td>
<td>Teachers</td>
<td>Exam for Granting “Ser Maestro” 2009 Recognition to the Basic Education Teacher</td>
<td>To acknowledge outstanding basic education teachers in the entity.</td>
<td>2009</td>
<td>Yes</td>
<td>Pre-school, primary and lower secondary school teachers.</td>
<td><a href="http://www.edomex.gob.mx/education">http://www.edomex.gob.mx/education</a></td>
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</tbody>
</table>

http://www.edomexico.gob.mx/evaluacioneducativa/index.htm
<table>
<thead>
<tr>
<th>State</th>
<th>Sphere of Assessment</th>
<th>Name</th>
<th>Objective</th>
<th>Beginning and Periodicity</th>
<th>Currently in Force</th>
<th>Demographic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guanajuato</td>
<td>Teachers</td>
<td>Diagnostic Evaluation of Teacher Education</td>
<td>To become familiar with the educational needs of teachers according to level, modality and the result of member analysis and experience analysis in order to draft teaching programmes and improve them.</td>
<td>2007 (annual)</td>
<td>Yes</td>
<td>Sector heads, supervisors, teaching heads, directors, technical aids and basic education teachers.</td>
<td><a href="http://www.seg.guanajuato.gob.mx/">http://www.seg.guanajuato.gob.mx/</a></td>
</tr>
<tr>
<td></td>
<td>Sector heads and supervisors</td>
<td>Diagnostic Assessment of the Updated Supervision Model</td>
<td>To become familiar with the updated supervision model, its five lines of work for restructuring and the improvement thereof.</td>
<td>2007 (annual)</td>
<td>Yes</td>
<td>Sector heads and supervisors.</td>
<td><a href="http://www.seg.guanajuato.gob.mx/">http://www.seg.guanajuato.gob.mx/</a></td>
</tr>
<tr>
<td>Jalisco</td>
<td>Teachers (in training)</td>
<td>Assessment of Basic Skills in Normal Education (EHBEN)</td>
<td>To become familiar with the levels of achievement in the entity’s normal schools.</td>
<td>2008 (annual)</td>
<td>Yes</td>
<td>Census of fifth semester students in all state normal education institutions.</td>
<td><a href="http://www.jalisco.gob.mx/wps/portal/sriaEducacion">http://www.jalisco.gob.mx/wps/portal/sriaEducacion</a></td>
</tr>
<tr>
<td></td>
<td>Learning</td>
<td>Chart of Factors Associated with Learning (CEFAA)</td>
<td>To identify the factors that affect learning results (characteristics of students and their families, of teachers and of school directors, and the classroom and the use of technology). To contextualise the results of the ENLACE test and EHBEN in normal education.</td>
<td>2009 (annual)</td>
<td>Yes</td>
<td>Census of students from primary school grade six, lower secondary school grade three, the last grade of upper secondary school and the fifth semester of normal schools. This also applies to the teachers and directors of such grades. It covers all primary, lower secondary, upper secondary and normal schools. Its application is parallel to the Enlace and EHBEN.</td>
<td><a href="http://www.jalisco.gob.mx/wps/portal/sriaEducacion">http://www.jalisco.gob.mx/wps/portal/sriaEducacion</a></td>
</tr>
<tr>
<td>State</td>
<td>Sphere of Assessment</td>
<td>Name</td>
<td>Objective</td>
<td>Beginning and Periodicity</td>
<td>Currently in Force</td>
<td>Demographic</td>
<td>Page</td>
</tr>
<tr>
<td>------------</td>
<td>----------------------</td>
<td>----------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------</td>
<td>---------------------------</td>
<td>-------------------</td>
<td>----------------------------------------------------------------------------</td>
<td>-------------------------------</td>
</tr>
<tr>
<td>Jalisco</td>
<td>Programmes</td>
<td>Assessment of the Strategic Programmes for Basic Education</td>
<td>To systematise follow-up on educational aid programmes beginning with four groups of indicators: efficacy (pedagogical dimension), effectiveness (political dimension), efficiency (economic dimension) and relevancy (cultural dimension).</td>
<td>Currently in Force</td>
<td>Twenty-four programmes for which the Directorate General of Strategic Programmes is responsible.</td>
<td><a href="http://www.jalisco.gob.mx/epip/portal/areaEducativa">http://www.jalisco.gob.mx/epip/portal/areaEducativa</a></td>
<td></td>
</tr>
<tr>
<td>Nuevo Leon</td>
<td>Learning</td>
<td>Nuevo Leon Intermediate Enlace</td>
<td>To obtain information on student learning in Spanish and mathematics in the middle of the school year in order to design a timely pedagogical intervention. To predict state academic achievement levels on the national ENLACE.</td>
<td>2007 (annual)</td>
<td>Yes</td>
<td>Census of primary school students in grades three to six as well as the three lower secondary school grades.</td>
<td><a href="http://www.nl.gob.mx/?P=sec_educacion">http://www.nl.gob.mx/?P=sec_educacion</a> <a href="http://www.nl.gob.mx/?P=ideeleon">http://www.nl.gob.mx/?P=ideeleon</a></td>
</tr>
<tr>
<td>Sonora**</td>
<td>Learning</td>
<td>Statewide Performance in Primary and Lower Secondary Schools [EVEDEPS]</td>
<td>To become familiar with the academic performance of state primary and lower secondary education in order to detect needs and opportunity areas for providing schools with continuous improvement.</td>
<td>2004</td>
<td>Yes</td>
<td>State census of primary and lower secondary schools</td>
<td><a href="http://www.ieees.gob.mx/">http://www.ieees.gob.mx/</a></td>
</tr>
<tr>
<td>Sonora**</td>
<td>Learning</td>
<td>Statewide Assessment of Upper Secondary Education [EVEDEMS]</td>
<td>To become familiar with the academic performance of state upper secondary education in order to detect needs and opportunity areas for providing schools with continuous improvement.</td>
<td>2004</td>
<td>Yes</td>
<td>Censo de estado de las escuelas secundariales superiores</td>
<td><a href="http://www.ieees.gob.mx/">http://www.ieees.gob.mx/</a></td>
</tr>
<tr>
<td>State</td>
<td>Sphere of Assessment</td>
<td>Name</td>
<td>Objective</td>
<td>Beginning and Periodicity</td>
<td>Currently in Force</td>
<td>Demographic</td>
<td>Page</td>
</tr>
<tr>
<td>------------</td>
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<td>---------------------------------------------------------------------------</td>
<td>---------------------------</td>
<td>--------------------</td>
<td>-------------------------------------------------------</td>
<td>---------------------------</td>
</tr>
<tr>
<td>Zacatecas</td>
<td>Learning</td>
<td>Assessment of School Performance for Students Who Finish Primary Education</td>
<td>To obtain a diagnostic of the academic output of the students who finish primary education and are to enter lower secondary education.</td>
<td>m</td>
<td>Yes</td>
<td>Students who finish primary education and enter lower secondary education.</td>
<td><a href="http://www.seczac.gob.mx/">http://www.seczac.gob.mx/</a></td>
</tr>
<tr>
<td>Teachers</td>
<td>Assessment of Teachers Who Aspire to Perform Technical Support Staff Duties</td>
<td>To assess teachers who aspire to perform pedagogical technical support staff duties in different academic programmes and/or projects.</td>
<td>m</td>
<td>Yes</td>
<td>Teachers who aspire to perform pedagogical technical support staff duties.</td>
<td><a href="http://www.seczac.gob.mx/">http://www.seczac.gob.mx/</a></td>
<td></td>
</tr>
</tbody>
</table>

*This information shown in the table was obtained using the information expressly provided for this report by the secretariats of education of such states. The remainder of the entities that provided information does not appear in this table. They did not provide information on in-house assessments conducted at the state level, but only participation in national assessments of a federal nature.

**The information regarding assessment efforts at Sonora's state level was obtained through online searches.

m: No data — there is no related information.
ANNEX I. BASIC EDUCATION SCHOOLS

Table 1. Figures for basic schools of the National Education System by control type¹ (2008-2009 school year)

<table>
<thead>
<tr>
<th>Level</th>
<th>Federal</th>
<th>State</th>
<th>Autonomous</th>
<th>Private</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-school</td>
<td>20 720</td>
<td>53 901</td>
<td>18</td>
<td>14 756</td>
</tr>
<tr>
<td>Primary</td>
<td>13 356</td>
<td>77 377</td>
<td>0</td>
<td>7 842</td>
</tr>
<tr>
<td>Lower Secondary</td>
<td>2 376</td>
<td>27 909</td>
<td>1</td>
<td>4 094</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>36 452</td>
<td>159 187</td>
<td>19</td>
<td>26 692</td>
</tr>
</tbody>
</table>

¹Control types: federal, state, private and autonomous.

Table 2. Indicators for basic education schools by education service (2008-2009 school year)

<table>
<thead>
<tr>
<th>Education Level</th>
<th>Service</th>
<th>Schools</th>
<th>Student /School</th>
<th>Group /School</th>
<th>Teacher /School</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-school</td>
<td>General</td>
<td>60 882</td>
<td>67.3</td>
<td>3.6</td>
<td>3.0</td>
</tr>
<tr>
<td></td>
<td>Indigenous</td>
<td>9 468</td>
<td>40.5</td>
<td>3.1</td>
<td>1.8</td>
</tr>
<tr>
<td></td>
<td>Community</td>
<td>19 045</td>
<td>8.0</td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td></td>
<td><strong>Subtotal</strong></td>
<td>89 395</td>
<td>51.8</td>
<td>3.0</td>
<td>2.4</td>
</tr>
<tr>
<td>Primary</td>
<td>General</td>
<td>77 470</td>
<td>179.0</td>
<td>8.2</td>
<td>6.7</td>
</tr>
<tr>
<td></td>
<td>Indigenous</td>
<td>9 918</td>
<td>84.8</td>
<td>6.5</td>
<td>3.6</td>
</tr>
<tr>
<td></td>
<td>Community</td>
<td>11 187</td>
<td>9.8</td>
<td>4.1</td>
<td>1.1</td>
</tr>
<tr>
<td></td>
<td><strong>Subtotal</strong></td>
<td>98 575</td>
<td>150.3</td>
<td>7.6</td>
<td>5.8</td>
</tr>
<tr>
<td>Lower Secondary</td>
<td>General</td>
<td>12 152</td>
<td>257.1</td>
<td>8.0</td>
<td>17.3</td>
</tr>
<tr>
<td></td>
<td>Technical</td>
<td>4 438</td>
<td>392.4</td>
<td>11.0</td>
<td>20.6</td>
</tr>
<tr>
<td></td>
<td>Telesecondary</td>
<td>17 475</td>
<td>71.8</td>
<td>4.0</td>
<td>3.7</td>
</tr>
<tr>
<td></td>
<td>For workers</td>
<td>315</td>
<td>101.8</td>
<td>5.8</td>
<td>13.6</td>
</tr>
<tr>
<td></td>
<td><strong>Subtotal</strong></td>
<td>34 380</td>
<td>179.0</td>
<td>6.3</td>
<td>10.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>222 350</td>
<td>115.2</td>
<td>5.5</td>
<td>5.2</td>
<td></td>
</tr>
</tbody>
</table>

### Table 1. Figures for basic education teachers (2008-2009 school year)

<table>
<thead>
<tr>
<th>Educational Level</th>
<th>Teachers</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-school</td>
<td>218 206</td>
<td>19%</td>
</tr>
<tr>
<td>Primary</td>
<td>568 752</td>
<td>49%</td>
</tr>
<tr>
<td>Lower Secondary</td>
<td>369 548</td>
<td>32%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1 156 506</td>
<td>100%</td>
</tr>
</tbody>
</table>


### Table 2. Number of basic education teachers per educational level and service type (2008-2009 school year)

<table>
<thead>
<tr>
<th>Educational Level</th>
<th>Services</th>
<th>Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-school</td>
<td>General</td>
<td>183 018</td>
</tr>
<tr>
<td></td>
<td>Indigenous</td>
<td>17 035</td>
</tr>
<tr>
<td></td>
<td>Community</td>
<td>18 153</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td></td>
<td><strong>218 206</strong></td>
</tr>
<tr>
<td>Primary</td>
<td>General</td>
<td>520 178</td>
</tr>
<tr>
<td></td>
<td>Indigenous</td>
<td>36 105</td>
</tr>
<tr>
<td></td>
<td>Community</td>
<td>12 469</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td></td>
<td><strong>568 752</strong></td>
</tr>
<tr>
<td>Lower Secondary</td>
<td>General</td>
<td>209 639</td>
</tr>
<tr>
<td></td>
<td>Technical</td>
<td>91 211</td>
</tr>
<tr>
<td></td>
<td>Telesecondary</td>
<td>64 422</td>
</tr>
<tr>
<td></td>
<td>For workers</td>
<td>4 276</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td></td>
<td><strong>369 548</strong></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>1 156 506</strong></td>
</tr>
</tbody>
</table>


### Table 3. Number of basic education teachers by control type¹ (2008-2009 school year)

<table>
<thead>
<tr>
<th>Educational Level</th>
<th>Federal</th>
<th>State and Autonomous</th>
<th>Private</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-school</td>
<td>25 903</td>
<td>149 244</td>
<td>43 059</td>
</tr>
<tr>
<td>Primary</td>
<td>39 431</td>
<td>475 934</td>
<td>53 387</td>
</tr>
<tr>
<td>Lower Secondary</td>
<td>29 120</td>
<td>288 739</td>
<td>51 689</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>94 454</td>
<td>913 917</td>
<td>148 135</td>
</tr>
</tbody>
</table>

¹Control types: federal, state, private and autonomous.


### Table 4. Number of primary and lower secondary teachers per study level (2008-2009 school year)

<table>
<thead>
<tr>
<th>Education Level</th>
<th>Undergraduate</th>
<th>Primary Normal</th>
<th>Lower Secondary Normal</th>
<th>Pre-school Normal</th>
<th>Upper secondary</th>
<th>Basic</th>
<th>Post-graduate</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary</td>
<td>49%</td>
<td>31.4%</td>
<td>10.4%</td>
<td>0.9%</td>
<td>1.4%</td>
<td>0.2%</td>
<td>4.2%</td>
<td>2.4%</td>
<td>568 752</td>
</tr>
<tr>
<td>Lower Secondary</td>
<td>47.7%</td>
<td>1.6%</td>
<td>32.2%</td>
<td>0.2%</td>
<td>7.6%</td>
<td>0.8%</td>
<td>8%</td>
<td>1.9%</td>
<td>369 548</td>
</tr>
</tbody>
</table>

### ANNEX K. TEACHERS WHO PARTICIPATE IN THE NATIONAL TEACHING CAREER PROGRAMME — BY YEAR AND LEVEL*

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Spaces¹</th>
<th>Number of Teachers Entering²</th>
<th>Number of Teachers per Career³</th>
<th>Level A</th>
<th>Level B</th>
<th>Level C</th>
<th>Level D</th>
<th>Level E</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992-1993</td>
<td>-</td>
<td>384 697</td>
<td></td>
<td>360 861</td>
<td>23 362</td>
<td>474</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1994</td>
<td>512 442</td>
<td>476 236</td>
<td></td>
<td>444 762</td>
<td>30 794</td>
<td>680</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1995</td>
<td>643 161</td>
<td>537 584</td>
<td></td>
<td>488 991</td>
<td>46 397</td>
<td>2 196</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1996</td>
<td>672 003</td>
<td>574 833</td>
<td></td>
<td>495 170</td>
<td>74 231</td>
<td>5 349</td>
<td>83</td>
<td>0</td>
</tr>
<tr>
<td>1997</td>
<td>690 676</td>
<td>604 003</td>
<td></td>
<td>475 689</td>
<td>118 570</td>
<td>9 606</td>
<td>138</td>
<td>0</td>
</tr>
<tr>
<td>1998</td>
<td>707 101</td>
<td>626 687</td>
<td></td>
<td>465 526</td>
<td>137 953</td>
<td>22 650</td>
<td>532</td>
<td>26</td>
</tr>
<tr>
<td>1999</td>
<td>736 367</td>
<td>640 624</td>
<td></td>
<td>463 453</td>
<td>138 880</td>
<td>36 682</td>
<td>1 582</td>
<td>27</td>
</tr>
<tr>
<td>2000</td>
<td>747 219</td>
<td>649 413</td>
<td></td>
<td>453 202</td>
<td>135 979</td>
<td>56 762</td>
<td>3 366</td>
<td>104</td>
</tr>
<tr>
<td>2001</td>
<td>744 859</td>
<td>667 771</td>
<td></td>
<td>442 805</td>
<td>150 657</td>
<td>68 415</td>
<td>5 766</td>
<td>128</td>
</tr>
<tr>
<td>2002</td>
<td>740 986</td>
<td>685 011</td>
<td></td>
<td>434 274</td>
<td>165 837</td>
<td>74 433</td>
<td>10 172</td>
<td>295</td>
</tr>
<tr>
<td>2003</td>
<td>737 897</td>
<td>704 996</td>
<td></td>
<td>428 648</td>
<td>180 564</td>
<td>79 180</td>
<td>15 925</td>
<td>679</td>
</tr>
<tr>
<td>2004</td>
<td>735 526</td>
<td>714 900</td>
<td></td>
<td>429 175</td>
<td>183 016</td>
<td>79 156</td>
<td>22 216</td>
<td>1 337</td>
</tr>
<tr>
<td>2005</td>
<td>738 827</td>
<td>723 332</td>
<td></td>
<td>428 278</td>
<td>185 393</td>
<td>79 986</td>
<td>27 344</td>
<td>2 331</td>
</tr>
<tr>
<td>2006</td>
<td>736 985</td>
<td>731 066</td>
<td></td>
<td>427 646</td>
<td>187 556</td>
<td>81 541</td>
<td>29 592</td>
<td>4 731</td>
</tr>
<tr>
<td>2007</td>
<td>722 196</td>
<td>742 162</td>
<td></td>
<td>429 066</td>
<td>190 381</td>
<td>82 721</td>
<td>31 549</td>
<td>8 445</td>
</tr>
<tr>
<td>2008</td>
<td>721 729</td>
<td>756 304</td>
<td></td>
<td>426 938</td>
<td>197 148</td>
<td>85 513</td>
<td>33 386</td>
<td>13 319</td>
</tr>
<tr>
<td>2009</td>
<td>677 850</td>
<td>774 115</td>
<td></td>
<td>421 477</td>
<td>205 408</td>
<td>91 462</td>
<td>37 491</td>
<td>18 277</td>
</tr>
<tr>
<td>2010</td>
<td>673 162</td>
<td>-</td>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

¹The number of candidates corresponds to the number of spaces-teachers registered to participate in the process for assessing the teaching career in the corresponding year; however, there are no registry identifications for 1992-1993.

²The number of teachers entering corresponds to the accumulated number of teaching career teachers up to the reference year.

³The number of teachers per career level corresponds to the accumulated number of teaching career teachers up to the reference year.

⁴There is no information for teachers incorporated and/or promoted for 2010 because the determination process has still not been carried out.

*Source: Drafted in-house based on information provided by the National Coordination of the Teaching Career (SEP-CNCM, 2010).
## Annex L. State-Level Studies for Analysing the Results of Student Learning Assessments

<table>
<thead>
<tr>
<th>State</th>
<th>Sphere of Assessment</th>
<th>Name</th>
<th>Objective</th>
<th>Beginning and Periodicity</th>
<th>Currently in Force</th>
<th>Demographic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aguascalientes</td>
<td>Learning</td>
<td>Analysis of State ENLACE Results</td>
<td>To detect areas of opportunity and formulate short-term actions.</td>
<td>m</td>
<td>Yes</td>
<td>Basic education schools.</td>
</tr>
<tr>
<td>Baja California</td>
<td>Learning</td>
<td>High Achievement School Profiles [PEAL] Study Cases</td>
<td>To construct a profile of successful primary schools beginning with factors associated with good achievement. To have equipment for self-assessment processes in school centres.</td>
<td>2009-2010</td>
<td>Yes</td>
<td>Sixty primary schools: 30 with a high level of achievement and 30 with a low level of achievement (Twelve were selected per municipality — six morning and six evening based on ENLACE result history.).</td>
</tr>
<tr>
<td></td>
<td>Learning</td>
<td>Factors Associated with Lower Secondary School Learning [FASA]</td>
<td>To identify the factors associated with state academic achievement at the lower secondary level.</td>
<td>2008-2010</td>
<td>Yes</td>
<td>Eighty-eight lower secondary schools, which include 21 650 students, in addition to teachers and directors.</td>
</tr>
<tr>
<td></td>
<td>Learning</td>
<td>Education Achievement Indicator System [SILE]</td>
<td>To create a system of indicators for achievement in basic and upper secondary education that includes 2008 and 2009 ENLACE results. In addition, indicators for advantages taken, approval, dropping out and terminal efficiency per school.</td>
<td>2008</td>
<td>Yes</td>
<td>Basic education schools.</td>
</tr>
<tr>
<td>Baja California Sur</td>
<td>Learning</td>
<td>Analysis and Pedagogical Use of 2009 ENLACE Results Workshop</td>
<td>To promote the analysis of the results obtained from the ENLACE test at the academic centre level in order to generate actions and have an impact on annual work plans.</td>
<td>2010</td>
<td>Yes</td>
<td>Primary education.</td>
</tr>
<tr>
<td>State</td>
<td>Sphere of Assessment</td>
<td>Name</td>
<td>Objective</td>
<td>Beginning and Periodicity</td>
<td>Currently in Force</td>
<td>Demographic</td>
</tr>
<tr>
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<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Colima</td>
<td>Learning</td>
<td>Analysis of 2009 ENLACE Reactive [sic] Results and Course Conclusion Exam Results at the Entity’s Level</td>
<td>To obtain information on content that constitutes student areas for improvement and formulate strategies for improving teachers’ work.</td>
<td>2010</td>
<td>Yes</td>
<td>One hundred fifty-one basic education schools.</td>
</tr>
<tr>
<td>Nuevo León</td>
<td>Learning</td>
<td>Academic Assessment Practices at the Primary Education Level in the State of Nuevo León</td>
<td>To describe the main classroom assessment practices teachers employ in primary education, and based on this, to establish proposals for their improvement.</td>
<td>2005</td>
<td>--</td>
<td>Six sector heads, 15 supervisors-inspectors, two sector head auxiliary technicians, one process project head, 30 directors and 313 teachers, all at the primary education level.</td>
</tr>
<tr>
<td>Sinaloa</td>
<td>Learning assessment processes</td>
<td>Annual State Assessment Workshop on Evaluative Processes</td>
<td>To review the activities carried out before, during and after each assessment process in which the entity participates.</td>
<td>2006 (annual)</td>
<td>Yes</td>
<td>Forty to 50 players participate, who act in the process as state, regional, municipal and auxiliary or seat coordinators. The workshop lasts for 20 hours.</td>
</tr>
</tbody>
</table>

m: No data — there is no related information.

Source: Information expressly provided for the report by the secretariats of education and/or the state authorities in education of the states indicated.
ANNEX M. OTHER ASSESSMENTS

Some examples of other assessments of SEN components are described below:

1. Assessment of the implementation of pedagogical reform to pre-school education (in effect).
   This assesses the development of teaching work and the function of academic centres. Its objectives are to identify changes in the daily performance of teaching personnel and directors at this level of education, beginning with the curricular reform of pre-school education; to assess the depth of these changes with respect to formal curricular approaches and regarding established practices in education at this level; and to identify areas for improvement. The SEB, through the DGDC, and the state authorities involved in the reform are responsible for assessment. The assessment’s methodology consists of a documented study on study plans and programmes and an exploratory field study. This is disseminated by means of academic teams that make decisions in matters of curricular development, as well as academic and state administrative teams. In order to implement results, actions are carried out for strengthening pedagogy, developing annual operative programmes, reviewing and reformulating curricula and developing aid materials (SEP-DGDC, 2010).

2. Assessment of free textbooks (in effect).
   This assesses consistency among textbooks and study programmes, technical and expressive characteristics and the relationship between the book and the teacher’s work dynamic. Its objective is to promote the continuous improvement of free textbooks. The DGME, associations, state secretariats, research institutes, regional and national teachers and directors and international authorities are responsible for assessment. The assessment’s methodology consists of an internal assessment using consultation forums, national and regional meetings and analysis workshops. It also consists of an external assessment using consultation forums and specialist review. It is disseminated through work panels for each grade and subject, and it is made available to the public through institutional Web sites. Results are implemented by updating the textbooks corresponding to the six primary school grades (SEP-DGME, 2010).

3. DGEI assessment (in effect).
   This assesses the achievement of set objectives, such as pertinence, efficiency, efficacy, impact and sustainability. Its objectives are to assess the performance of the DGEI’s duties, to assess the correspondence among objectives and results, to become familiar with the impact on the indigenous population, to assess transparency and to assess accountability. Officers, teachers, students and parents are responsible for assessment. The assessment’s methodology is the assessment model based on the logical framework. It is disseminated by means of the Indigenous Education Information System through meetings and debates with the players involved in indigenous education. Results are implemented by adapting and/or redesigning DGEI policy in order to adjust it to the needs of the indigenous population (SEP-DGEI, 2010).
ANNEX N. CONEVAL

The National Council for the Evaluation of Social Development Policy [CONEVAL] is a decentralised public agency of the Federal Public Administration that was created in 2005. It is autonomous and has the technical capacity to generate objective information regarding the state of social policy and the measurement of poverty in Mexico, which allows for decision-making in this matter.\(^{138}\)

This agency’s main functions are: 1) to regulate and coordinate the assessment of national social development policy and the policies, programmes and actions executed by public departments and 2) to establish the guidelines and criteria for defining, identifying and measuring poverty while guaranteeing the transparency, objectivity and technical rigor of such activity. The CONEVAL’s role is part of national social development policy, which is in agreement with the objectives established in the General Law on Social Development [LGDS] (DOF, 20 January 2004), which indicates that manners of social participation must be guaranteed in formulating, executing, implementing, assessing and controlling social development programmes. The assessment of social development policy implies the review of numerous processes that include the design, operation, impact, efficiency and efficacy of policies and programmes in order to improve the effectiveness of government actions and to comply with social policy objectives and focal points (CONEVAL, 2010\(^6\)).

In this manner, the CONEVAL, together with the 2007-2012 National Development Plan, contributes to Focal Point 5: Effective Democracy and Responsible Exterior Policy (Presidencia de la República, 2007). This is also done in conjunction with the 2007-2012 Social Development Sector Programme (SEDESOL, 2008), which establishes national objectives and strategies in matters of social development and attempts to contribute to sustainable human development through the development of basic abilities in education, health and nutrition that permit increased equal opportunity for entry and improvement, especially for members of the population living in poverty.

The implementation of actions aimed at promoting equal opportunities is required for meeting this goal in order to close the gap between those who have more and those who have little. The Secretariat of Social Development posits five objectives for contributing to meeting the challenges established by the Federal Public Administration during this period. Specifically, objective 5 establishes “fostering the use of public resources through efficient management and better interinstitutional coordination with the three levels of government and civil society” by means of strategy 5.4 — “to institutionalise the processes for planning, assessing and monitoring for the purpose of providing feedback on programmes and improving service to the beneficiary population” — and strategy 5.5 — “to reduce operating costs, increase productivity and improve the quality of the goods and services granted”. The goal of strategy 5.4 is to strengthen the planning and assessment processes that allow for feedback on programmes and, in this manner, to improve service to the beneficiary population, as well as to develop a monitoring system based on results so that programmes may become familiar with the result of management at that time and improve their processes [sic]”. The goal of strategy 5.5 is to minimise discretion, avoid intermediaries and minimise the drain on resources; therefore, indicators that allow for the objective analysis and disclosure of expense efficiency will be adopted and strengthened (CONEVAL, 2010\(^6\)).

The following are the documents that regulate the assessment of federal programmes in the education sector: the Annual Assessment Programme [PAE] issued by the SHCP, the SFP and the CONEVAL; the general guidelines for assessing federal programmes of the Federal Public Administration (DOF, 30 March 2007); the Federal Budget and Treasury Accountability Law and its regulations (DOF, 30 March 2006); the LGDS and its regulations (DOF, 20 January 2004); the National Expenditures Budget; the 2007-2012 Education Sector Programme; the Law of Acquisitions, Leases and Public Sector Services (DOF, 4 January 2000); and the Mechanism for Following up on Aspects Susceptible to Improvement Derived from External Assessments and Reports on Federal Programmes.

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\(^{138}\) For more information on the decree providing for the creation of the CONEVAL, see the following Web page: http://medusa.coneval.gob.mx/cms/coneval/rw/resource/coneval/quienes/1814.pdf?view=true
## Annex O. Current Programmes of the Undersecretariat of Basic Education, 2010*

<table>
<thead>
<tr>
<th>Programme Code</th>
<th>Programmes</th>
<th>Programmes’ Objectives</th>
<th>Population Addressed</th>
</tr>
</thead>
<tbody>
<tr>
<td>U033</td>
<td>Contribution Fund for Basic and Normal Education [FAEB] (Extensions are determined by the House of Representatives.)</td>
<td>To provide complementary aid for financing basic and normal education in the states (Basic and Normal Education Contribution Fund resources are exclusively allocated to the functions assigned to them in Articles 13 and 16 of the General Education Law.).</td>
<td>Determined by states.</td>
</tr>
<tr>
<td>B002</td>
<td>Production and Publication of Books and Educational Materials</td>
<td>To produce and update printed, audiovisual and computer education materials so that teachers have tools for contributing to the student development of the characteristics described in the basic education completion profile.</td>
<td>Mexican basic education students and teachers</td>
</tr>
<tr>
<td>E001</td>
<td>Enciclomedia</td>
<td>An educational strategy based on a system for linking learning resources to organise an archive of free textbooks through the aid of computers and help in researching, documenting and deepening the knowledge of curricular matters.</td>
<td>Mexican primary education grades five and six students and teachers</td>
</tr>
<tr>
<td>E014</td>
<td>Promotion and Development of Books and Reading</td>
<td>To promote the use, consolidation and stocking of school and classroom libraries in Mexico’s public schools. To develop trade books as aids for promoting reading, beginning with the Spanish subject.</td>
<td>Mexican basic education teachers and students</td>
</tr>
<tr>
<td>S128</td>
<td>National Reading Programme</td>
<td>To improve students’ communicative abilities, aiding schools’ capacities to educate competent users of written culture. Also, to establish and provide bibliographical archives — known as classroom and school libraries — that cover a wide range of literary and informative themes and genres.</td>
<td>Public basic and normal students, teachers and directors of all levels and modalities</td>
</tr>
<tr>
<td>S152</td>
<td>Programme for Strengthening Telesecondary Education</td>
<td>To contribute to strengthening telesecondary students’ life skills through improving the level of academic achievement.</td>
<td>Telesecondary grades one to three students and teachers throughout Mexico</td>
</tr>
<tr>
<td>S223</td>
<td>Digital Skills for Everyone</td>
<td>This programme exists so that young people can acquire a higher degree of preparation and learning with the aid and use of information and communication technologies so that they may successfully enter into knowledgeable society.</td>
<td>Mexican basic education teachers and students</td>
</tr>
<tr>
<td>U060</td>
<td>Extraordinary Aid for Cultural Activities regarding the Bicentennial and Centennial of Mexican Independence and the Revolution</td>
<td>To provide complementary aid to the states for financing cultural activities regarding the bicentennial and centennial of Mexican Independence and the Revolution.</td>
<td>m</td>
</tr>
<tr>
<td>Programme Code</td>
<td>Programmes</td>
<td>Programmes’ Objectives</td>
<td>Population Addressed</td>
</tr>
<tr>
<td>----------------</td>
<td>------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>U016</td>
<td>Schools that are Always Open to the Community</td>
<td>To plan activities, beginning with identifying the needs and interests of community members. These activities are carried out in coordination with other institutions.</td>
<td>Public primary and lower secondary schools and children, young people, adults and senior citizens</td>
</tr>
<tr>
<td>U032</td>
<td>Educational Service to Vulnerable Groups (Extensions are determined by the House of Representatives.)</td>
<td>To contribute to the access to, permanence of and improvement of the academic achievement of vulnerable children and adolescents.</td>
<td>Basic education populations and schools that, because of structural and/or temporary reasons, are vulnerable to being excluded from education.</td>
</tr>
<tr>
<td>U059</td>
<td>State Cultural Institutions</td>
<td>m</td>
<td>m</td>
</tr>
<tr>
<td>E021</td>
<td>Scientific Research and Technological Development</td>
<td>To aid in the development of educational research and innovation oriented toward the analysis and improvement of basic education.</td>
<td>Research centres specialising in basic education</td>
</tr>
<tr>
<td>S029</td>
<td>Quality Schools Programme</td>
<td>To contribute to improving the academic achievement of students from participating public basic education schools by implementing a school management model.</td>
<td>All levels and modalities of public basic education schools and within the national sphere</td>
</tr>
<tr>
<td>S111</td>
<td>Basic Education Programme for Children of Immigrant Farm Workers’ Families</td>
<td>To establish conditions for the educational centres located in agricultural camps in order to provide adequate service backed by diverse didactic materials. This curricular proposal includes teacher education processes and making school hours and calendars flexible so that they are adapted to the times in which immigrant day labourer families are present.</td>
<td>Children between ages three and sixteen</td>
</tr>
<tr>
<td>S221</td>
<td>Full-Time School Programme</td>
<td>To create educational environments that favour improved learning conditions and the development of student skills in accordance with basic education goals, from the possibilities offered by extending school hours to establishing and diversifying educational activities.</td>
<td>Pre-school, primary and lower secondary schools of the 31 states and the Federal District</td>
</tr>
<tr>
<td>S222</td>
<td>Safe School Programme</td>
<td>To consolidate public basic education schools as safe spaces that are free of violence and addiction and that favour the comprehensive education of students.</td>
<td>Pre-school, primary and lower secondary schools of the 31 states and the Federal District</td>
</tr>
<tr>
<td>Programme Code</td>
<td>Programmes</td>
<td>Programmes’ Objectives</td>
<td>Population Addressed</td>
</tr>
<tr>
<td>----------------</td>
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</tr>
<tr>
<td>S033</td>
<td>Programme for Strengthening Special Education and Educational Integration</td>
<td>To promote the access, permanence and academic achievement of children and young people who have disabilities and/or are gifted by means of strengthening the educational integration process and special education services.</td>
<td>Children and young people with special education needs and the personnel who attend to them</td>
</tr>
<tr>
<td>U031</td>
<td>Strengthening Early Education and Childhood Development (Extensions are determined by the House of Representatives.)</td>
<td>To contribute to strengthening early education, attaining increased coverage and updating pedagogical standards.</td>
<td>Child development centres</td>
</tr>
<tr>
<td>U061</td>
<td>Equipping Schools for Basic Education at the National Level</td>
<td>To contribute and attend to the issue of maintaining, preserving and rehabilitating and, if necessary, adjusting public education spaces allocated to basic education for the purpose of restoring the functionality of physical infrastructure through financing actions using federal, state and private resources.</td>
<td>Pre-school, primary and lower secondary schools</td>
</tr>
<tr>
<td>U042</td>
<td>Strengthening Actions Associated with Indigenous Education</td>
<td>To contribute to strengthening actions associated with indigenous education.</td>
<td>m</td>
</tr>
<tr>
<td>S119</td>
<td>Technical-Pedagogical Advising Programme</td>
<td>This consists of implementing consultancy on primary schools of the indigenous education subsystem through a teacher trained in the principles of intercultural bilingual education, which is conceived as that which recognises and addresses cultural and linguistic diversity.</td>
<td>Indigenous primary education schools and teachers</td>
</tr>
<tr>
<td>S108</td>
<td>Scholarship Programme for Aiding Basic Education for Young Mothers and Young Pregnant Women</td>
<td>To contribute to the reduction of regional and gender inequalities in educational opportunities, aiding young mothers and young pregnant women, without regard for marital status, to continue with and finish basic education at any public educational modality available in the states.</td>
<td>Adolescents with any marital status who are mothers or are pregnant and whose ages range from 12 to 18 years 11 months.</td>
</tr>
<tr>
<td>S127</td>
<td>National System for the continuous training and Professional Advancement of In-service Basic Education Teachers Programme</td>
<td>This is the federal means for financial, technical and pedagogical aid for state authorities in education so that they may provide permanent education and professional advancement services, as well as offer diverse, relevant and quality educational programmes to teachers.</td>
<td>In-service basic education</td>
</tr>
<tr>
<td>S227</td>
<td>Programme for Strengthening Learning School Communities, Contestable</td>
<td>To contribute to the strengthening of learning school communities in basic education schools.</td>
<td>Selected basic education schools</td>
</tr>
</tbody>
</table>

*Source: Drafted in-house based on SEP-UPEPE (2009) and SEP-DGME (2010).

: No data — there is no related information.
### ANNEX P. CHARACTERISTICS OF SEB-OPERATED PROGRAMME ASSESSMENT®

<table>
<thead>
<tr>
<th>Programme Name</th>
<th>Initial Year</th>
<th>Type</th>
<th>Programme Web Page</th>
<th>Indicator Matrix</th>
<th>System of Indicators</th>
<th>List of Beneficiaries</th>
<th>Type of Assessments</th>
<th>Assessment Institute</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scientific Research and Technological Development</td>
<td>m</td>
<td>E</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>m</td>
<td>2009 design and 2009 performance</td>
<td>CIDE and others</td>
</tr>
<tr>
<td>Promotion and Development of Books and Reading</td>
<td>2002</td>
<td>E</td>
<td><a href="http://lectura.dgme.sep.gob.mx/">http://lectura.dgme.sep.gob.mx/</a></td>
<td>Yes</td>
<td>Yes</td>
<td>SEN students and teachers at the basic level. The list is drafted by the Work Centre Catalogue [CCT] of the schools that have school and classroom libraries.</td>
<td>Not assessed</td>
<td></td>
</tr>
<tr>
<td>Production and Editing of Books and Educational Materials</td>
<td>2008</td>
<td>B</td>
<td>Books are listed on the RIEB Web page.</td>
<td>This does not apply — internal assessments.</td>
<td>Internal SEB assessments and external assessments</td>
<td>DGDC, DGDGIE and DOME, in collaboration with the UNAM, UAM and UPN</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Programme Name</td>
<td>Initial Year</td>
<td>Type</td>
<td>Programme Web Page</td>
<td>Indicator Matrix</td>
<td>System of Indicators</td>
<td>List of Beneficiaries</td>
<td>Type of Assessments</td>
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<tr>
<td>Programme for Strengthening Special Education and Educational Integration</td>
<td>2002</td>
<td>S</td>
<td><a href="http://www.educacione">www.educacione</a> special.sep.gob.mx</td>
<td>Yes</td>
<td>Yes</td>
<td>2007-2008 list of special education services and 2008-2009 list of basic education public schools that receive special education aid.</td>
<td>2007 design, consistency and results; 2008 and 2009 performance</td>
<td>UNAM; FLACSO; and Cívico Consultores, S.C.</td>
</tr>
<tr>
<td>Technical-Pedagogical Advising Programme</td>
<td>2003</td>
<td>S</td>
<td><a href="http://basica.sep.gob.mx/dgei/start.php">http://basica.sep.gob.mx/dgei/start.php</a></td>
<td>Yes</td>
<td>Yes</td>
<td>There is a list of beneficiaries drafted based on the database using the 30 fields requested by the Master List of Government Programmes [SIIIP-G], which is overseen by the SFP. See list at: <a href="http://basica.sep.gob.mx/dgei/pdf/inicio/atp/padrondeusuarios.xls">http://basica.sep.gob.mx/dgei/pdf/inicio/atp/padrondeusuarios.xls</a></td>
<td>2007 design, consistency and results; 2008 and 2009 performance; and 2008 and 2009</td>
<td>UPN; C-230 Consultores, S.C. and Cívico Consultores S.C.; FLACSO; and the Centre for Research and Higher Studies in Social Anthropology [CIESAS]</td>
</tr>
<tr>
<td>Enciclomedia</td>
<td>2004</td>
<td>E</td>
<td><a href="http://www.enciclonedia.edu.mx">http://www.enciclonedia.edu.mx</a></td>
<td>Yes</td>
<td>Yes</td>
<td>This does not exist because the beneficiaries of this programme are indirectly the grades five and six primary school students who have Enciclomedia. There is a record of Enciclomedia's installation in classrooms.</td>
<td>2007 design, consistency and results</td>
<td>FLACSO</td>
</tr>
<tr>
<td>Programme Name</td>
<td>Initial Year</td>
<td>Type</td>
<td>Programme Web Page</td>
<td>Indicator Matrix</td>
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</tr>
<tr>
<td>National Reading Programme</td>
<td>2005</td>
<td>S</td>
<td><a href="http://lectura.dgme.sep.gob.mx/">http://lectura.dgme.sep.gob.mx/</a></td>
<td>Yes</td>
<td>Yes</td>
<td>In process, using state-generated information.</td>
<td>2007 design, consistency and results; 2009 and 2008 performance</td>
<td>UPN, Ivico Ahumada and Cívicos</td>
</tr>
<tr>
<td>Programme for Strengthening Telesecondary Education</td>
<td>2006</td>
<td>S</td>
<td><a href="http://telesecundaria.dgme.sep.gob.mx">http://telesecundaria.dgme.sep.gob.mx</a></td>
<td>Yes</td>
<td>Yes</td>
<td>Meetings are scheduled with the SFP in order to define the list of beneficiaries.</td>
<td>2007 design, consistency and results; 2008 and 2009 performance</td>
<td>UPN; C-230 Consultores, S.C.; and Cívicos Consultores S.C.</td>
</tr>
<tr>
<td>National System for the Continuous Training and Professional Advancement of In-service Basic Education Teachers Programme</td>
<td>2009</td>
<td>S</td>
<td><a href="http://formacioncontnua.sep.gob.mx/">http://formacioncontnua.sep.gob.mx/</a></td>
<td>Yes</td>
<td>Yes</td>
<td>There is none because the programme is directed toward all in-service basic education teachers, and their participation is voluntary. Notwithstanding, each programme offer contains beneficiary information, from the registry system.</td>
<td>2007 design, consistency and results; 2008 and 2009 performance; and 2009 design</td>
<td>FLACSO; COMIE; UPN; C-230 Consultores, S.C.; Cívicos Consultores, S.C.; and the Autonomous University of Aguascalientes</td>
</tr>
<tr>
<td>Digital Skills for Everyone</td>
<td>2009</td>
<td>S</td>
<td><a href="http://www.aulatelematica.com.mx/Paginas/Accede">http://www.aulatelematica.com.mx/Paginas/Accede</a></td>
<td>Yes</td>
<td>Yes</td>
<td>m</td>
<td>2009 design</td>
<td>Institute of Research on Universities and Education (UNAM)</td>
</tr>
<tr>
<td>Programme Name</td>
<td>Initial Year</td>
<td>Type</td>
<td>Programme Web Page</td>
<td>Indicator Matrix</td>
<td>System of Indicators</td>
<td>List of Beneficiaries</td>
<td>Type of Assessments</td>
<td>Assessment Institute</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------------</td>
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<tr>
<td>Schools that are Always Open to the Community</td>
<td>2009</td>
<td>U</td>
<td><a href="http://basica.sep.gob.mx/escuelasiempreabierta/">http://basica.sep.gob.mx/escuelasiempreabierta/</a></td>
<td>Yes</td>
<td>Yes</td>
<td>In 2009, 6,600 schools from January to June</td>
<td>Not assessed</td>
<td>Not assessed</td>
</tr>
<tr>
<td>Strengthening Early Education and Childhood Development (Extensions are determined by the House of Representatives.)</td>
<td>2009</td>
<td>U</td>
<td><a href="http://basico.sep.gob.mx/reformaintegral/">http://basico.sep.gob.mx/reformaintegral/</a></td>
<td>No</td>
<td>No</td>
<td>In process: child development centres (legal entity)</td>
<td>This was not assessed because it is an extension.</td>
<td></td>
</tr>
<tr>
<td>Educational Service to Vulnerable Groups (Extensions are determined by the House of Representatives.)</td>
<td>2009</td>
<td>U</td>
<td><a href="http://basica.sep.gob.mx/dgdgie">http://basica.sep.gob.mx/dgdgie</a></td>
<td>No</td>
<td>No</td>
<td>In process: States are identifying the schools that will be addressed under this model.</td>
<td>This was not assessed because it is an extension.</td>
<td></td>
</tr>
<tr>
<td>Strengthening Actions Associated with Indigenous Education (Extensions are determined by the House of Representatives.)</td>
<td>2009</td>
<td>U</td>
<td>m</td>
<td>m</td>
<td>m</td>
<td>m</td>
<td>This was not assessed because it is an extension.</td>
<td></td>
</tr>
</tbody>
</table>

*Source: Drafted in-house based on SEP-UPEPE (2009) and SEP-DGME (2010).*

*No data — there is no related information.*
ANNEX Q. QUALITY SCHOOLS PROGRAMME

The PEC began operating during the 2001-2002 school year as an institutional and school management initiative whose goal is to overcome various obstacles to academic achievement, such as schools’ wide margin for making decisions; insufficient development in planning; the absence of external school assessment; the absence of informative feedback in order to improve school performance; conditions that do not favour the development of effective director, supervisor and sector head leadership; the poor link among academic players; absenteeism; the non-efficient use of the school resources that are available; limited social participation; the existence of routine teaching practices; and deficiencies in infrastructure and equipment (PEC, 2010).

The programme is a federal type S programme with operative rules and a list of beneficiaries. It is directed at all levels and modalities of public basic education schools in the 31 states and the Federal District, placing a priority on schools located in moderately to very highly marginalized urban zones; schools that attend to the indigenous population; schools with students who receive scholarships from the Opportunities Programme; camps that attend to immigrant farm workers’ children; the CONAFE community centres; multi-grade schools; schools that attend to students with special education needs; and, from 2006, schools with students whose ENLACE results are not sufficient. Schools that have not accumulated more than four years in the programme are also taken into consideration; otherwise, the corresponding state will define an aid strategy (DOF, 18 December 2009; PEC, 2010). The responsible unit is the Directorate General for the Development of Education Management and Innovation of the SEB.

The programme’s objective is to contribute to improving the academic achievement of students in public basic education schools that benefit from the PEC by implementing a school management model with a strategic focus on improving student learning and teaching practices and that fairly attends to diversity, supported by a plan for social participation, joint financing, transparency and accountability139. Its specific objectives are: a) to establish in each school that benefits from the programme a transformation dynamic in school management by means of the provision of tools and methods for planning and assessment with a strategic focus, concurrent with basic education structures; b) to direct strategic school management toward strengthening pedagogical practice based on the educational needs of the students identified by the teaching collective in the schools participating in the programme; c) to establish strategies for promoting social participation for the purpose of encouraging the community's collaboration in school life, joint financing, transparency and accountability; d) to strengthen federal, state and municipal institutional coordination mechanisms that promote policies and actions for technical and financial aid for the purpose of favouring management capacity and the regular operation of the schools taking part in the programme (PEC, 2010).

The PEC may be classified as part of the educational reform movement known as school-centred management. This model is mainly based on the following suppositions: a) that entitling school communities to make decisions will improve planning and the execution of school improvement plans with mid- and long-term strategic focuses; b) that this redistribution of authorities will increase transparency and accountability as a result of clearly defining each participant’s responsibilities in the educational environment; and c) that empowering schools will create a participative democratic planning model in which heads of families, students and school personnel assume more responsibility regarding school activities.

School participation is voluntary. This programme has relied on partial financing from the BIRF in the form of external loans backed by the Mexican government’s budgetary sufficiency for its operation. In order to attend to the schools that benefit from the programme, a financing network was created by means of a trust called the National Fund for Quality Schools and state trusts for quality state schools. This trust permits the distribution of resources to schools benefiting from the programme throughout the school year, taking into consideration the availability of federal and state resources, as well as the operative rules of the PEC for the

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139 Initially, the PEC school planning methodology was based on prior experience and documents taken from a programme called the Primary School Management Project. However, there were three significant differences in implementation focuses observed, which was mainly because the PEC promotes decentralised processes in decision-making and supports an increased SEN accountability.
corresponding school year\textsuperscript{140} (DOF, 18 December 2009). The operative processes are: establishing, financing, continuous training, support, internal evaluation and communication\textsuperscript{141}.

This programme is aligned with the PND and the PROSEDU, as well as with the PND’s Focal Point 3: Equal Opportunities (with an indirect contribution); 3.1: Overcoming Poverty; Objective 1: Significantly reducing the number of Mexicans living in poverty using public policies that go beyond a welfare focus so that these people are able to acquire skills and to create work opportunities; and Strategy 1.4: The democratic participation of poor communities will be promoted in decisions regarding the actions to take within distinct social policy programmes.

Communities have a longstanding tradition — oftentimes millennia-long — of mutual aid. These are networks that must be taken advantage of in order to work in zones with high indices of marginalisation to encourage the coordination of social capital and, in this manner, so that participants manage resources and turn to governmental programmes to solve community lag. Communities will participate in determining which works are those that are most urgently assigned the financial resources needed for their realisation. Communities are more aware than anyone else of what they need most. They will ensure that shared work is beneficial to them. For this reason, communities will participate in following up on and assessing the actions performed, contributing directly. 3.3 Educational Transformation, Objective 9: To elevate educational quality. Strategy 9.4: To strengthen educational federalism in order to ensure the SEN’s long-term operational viability, promoting responsible forms of financing and maintaining a highly-efficient operation. Objective 12: To promote the complete education of individuals throughout the entire education system. Strategy 12.1: To position the school community in the centre of educational efforts. Strategy 12.2: To promote the participation of heads of families in school decision-making.

With the PROSEDU in Objective 6: To encourage school and institutional management that strengthens the participation of school centres in decision-making; makes the various social and educational players jointly responsible; and promotes the safety of students and teachers, transparency and accountability. Strategy 6.1: To reactivate social participation in the basic education sphere. Strategy 6.6: To generate new mechanisms for coordinating basic education policies among the federal government and the states (National Council for the Evaluation of Social Development Policy, 2009b).

Schools participating in the PEC are required to:

1) Have established or reactivated their school committees on social participation and voluntarily requested their participation once they have published the call for the corresponding school year; 2) train themselves in order to draft their strategic plans; and 3) submit their Strategic School Transformation Plan [PETE], or the equivalent, and for their Annual Work Plan [PAT] proposals to the entity's ruling committee. The PETE is a planning tool that serves as a means for initiating school transformation processes. This permits the educational and social players that participate in schools to have a general view of the most significant lines of work and the results to attain in the mid- and long-term, as well as to establish school strategic reference bases in the terms of the widest scope of the proposals and commitments for which they are responsible, taking programming and budgeting into consideration. The PETE realises its short-term operations through a PAT that specifies actions to be financed and carried out within a school year (PEC, 2010).

2) Schools that have remained in the programme for more than five school years may be invited to continue participating and to receive programme financing, provided they comply with a series of conditions, such as: to have improved their levels of academic achievement measured using the latest average results obtained from the ENLACE in which they participated compared to the results of the preceding test (DOF, 18 December 2009). From 2008 to 2009, 64% of schools improved their achievement levels (CONEVAL, 2009b).

The programme’s general coordination in each state is responsible for ensuring that basic education schools, principally those considered priority schools, have more and better information regarding: a) the

\textsuperscript{140} Please see Web page http://basica.sep.gob.mx/pec/pdf/RO/ROPEC2010.pdf for more information regarding the PEC’s rules of operation.

\textsuperscript{141} Please see chapter 4 for more information regarding the internal assessment.
benefits the programme grants and the responsibilities they contract for upon establishment; b) participation requirements; c) contents and training dates required for drafting their strategic plans; d) the Quality Schools Programme's information system as a tool for monitoring and following up on committed improvement actions, as well as for transparency and the accountability.

Through the National Quality Schools Trust, the SEP transfers the corresponding resources to states through their corresponding state trusts, in the proportion represented by their population ages 4 to 14 with respect to the national total and according the current information of the INEGI (2005). For each peso the state government contributes to the state trust, the SEP contributes three. The limit is determined by the operative rules.

The PEC’s resources are additional and complementary to those provided in current federal, state and municipal programmes allocated to infrastructure and the operation of schools. These do not substitute for the regular resources allocated to these ends. The SEP manages programme resources allocated to aid for schools that benefit from it through the National Trust, through each entity's responsible unit by means of its state trust and through the schools.

There are two types of benefits for schools participating in the PEC: 1) academic aid, through the state educational structure, to transform the schools’ organisation and function by means of training, consulting, support and following up on developing the PETE and the PAT, and 2) initial financial aid, which varies for each state, up to a maximum amount of $50,000.00 pesos per school year, so that schools address their needs based on their planning, with a mid- and long-term strategic focus and an annual work plan that allocates resources to actions to strengthen teacher, director and head of family skills and to the purchase of educational materials, books, and computer equipment with the main goal of improving the academic achievement results of students and the physical conditions that aid in such achievement through the construction, extension and improvement of school facilities. In addition to this first sum, for each peso that the school community is able to raise for the school, the programme’s state trust will deliver another peso, up to an amount of $50,000.00 pesos. This makes it possible for a school to raise an approximate total amount of $150,000.00 pesos per school year.

As an exception, a transfer of up to $70,000.00 pesos of initial aid may be made to schools that have just entered or have participated in the programme for at least four years. They must also be focused on highly or very-highly marginalised zones and/or those that attend to vulnerable populations. The foregoing takes into consideration the financial availability of each state, without affecting the different financing strategies.

Schools benefitting from the programme during the 2010-2011 school year and that have participated for four years may distribute resources in the following manner: at least 50% in order to strengthen teacher, director and head of family skills, as well as to purchase technical equipment, books, tools, school and teaching materials and other components that enrich the student learning process. The remainder may be allocated to the rehabilitation, refurbishment, maintenance, construction and/or expansion of educational spaces, as well as to the acquisition of furnishings.

Schools benefitting from the programme that do not comply with the foregoing may use resources in the following manners: at least 30% in order to strengthen teacher, director and head of family skills, as well as to acquire technical equipment, books, tools, school and teaching materials and other components that enrich the student learning process. The remainder may be allocated to the rehabilitation, refurbishment, maintenance, construction and/or expansion of educational spaces, as well as to the acquisition of furnishings.

Schools that have participated in the programme for more than five school years and have been invited to continue participating must use the resources to strengthen teacher, director and head of family skills in order to strengthen the use and advantage taken of information and communication technologies, as well as the purchase of technical equipment to strengthen pedagogical management and acquire books, tools, school and didactic materials and other components that enrich the student learning process. These resources may not be allocated to the investment in infrastructure.
The national coordination and general state coordinating agencies of the PEC promote the implementation of mechanisms that contribute to dissemination of programme results throughout society, as well as implementation of consultation and information mechanisms in order to encourage transparency and accountability, as indicated in the Federal Law of Transparency and Access to Public Government Information. The SEP and secretariats of education, or their equivalents in the states, disseminate information regarding amounts and beneficiaries in terms of the Federal Law of Transparency and Access to Public Government Information (PEC, 2010).