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Report No: PAD865

#### INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVLOPMENT

#### PROJECT APPRAISAL DOCUMENT

#### ON A

#### PROPOSED LOAN

#### IN THE AMOUNT OF US\$350 MILLION

#### TO THE

#### UNITED MEXICAN STATES

#### FOR A

#### SCHOOL BASED MANAGEMENT PROJECT

#### October 2, 2014

Education Global Practice Latin America and the Caribbean Region

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## CURRENCY EQUIVALENTS (Exchange Rate Effective August 20, 2014)

Currency Unit = Mexican Peso MX\$1.00 = US\$0.08 US\$1 = MX\$13.08

### FISCAL YEAR

January 1 – December 31

## ABBREVIATIONS AND ACRONYMS

AEF	Federal Education Authority (Autoridad Educativa Federal)
AEL	Autoridad Educativa Local (Local Education Authority)
CEPS	School Council of Social Participation (Consejos Escolares de
	Participación Social)
CONAPASE	National Council of Social Participation in Education (Consejo
	Nacional de Participación Social en la Educación)
CONEVAL	National Council for the Evaluation of Social Development
	Policy (Consejo Nacional de la Evaluación de la Política de
	Desarrollo Social)
CPS	Country Partnership Strategy
CTE	Technical School Council (Consejo Técnico Escolar)
CTPS	Social Participation Technical Council (Consejo Técnico de
	Participación Social)
DGAG	Directorate of School Management (Dirección General Adjunta
	de Gestión)
DGDGIE	General Directorate of School Management and Education
	Innovation (Dirección General de Desarrollo de la Gestión e
	Innovación Educativa)
DGE	General Directorate of Evaluation (Dirección General de la
	Evaluación)
ENLACE	National Evaluation of Academic Achievement in Schools
	(Evaluación Nacional del Logro Académico de Centros
	Escolares)
FEEC	State Trust Funds (Fideicomisos Estatales de Escuelas de
	Calidad)
FM	Financial Management
FNEC	National Trust Fund (Fideicomiso Nacional de Escuelas de
	Calidad)
FY	Fiscal Year
GDP	Gross Domestic Product
GoM	Government of Mexico
IBRD	International Bank for Reconstruction and Development
IDA	International Development Association

IFC	International Finance Corporation
IMF	International Monetary Fund
INEE	National Institute for the Evaluation of Education (Instituto
	Nacional para la Evaluación de la Educación)
INEGI	National Institute of Statistics and Geography (Instituto Nacional
	de Estadística y Geografía)
LAC	Latin America and the Caribbean
NAFIN	Nacional Financiera, S.N.C., I.B.D
NDP	National Development Plan (Plan Nacional de Desarrollo)
OECD	Organization for Economic Co-operation and Development
PDO	Project Development Objective
PEC	Quality Schools Program (Programa Escuelas de Calidad)
PETC	Full Time Schools Program (Programa Escuelas de Tiempo
	<i>Completo</i> )
PISA	Program for International Student Assessments
PSE	Education Sector Program (Programa Sectorial de Educación)
SBM	School Based Management
SEB	Subsecretariat of Basic Education (Subsecretaría de Educación
	Básica)
SEP	Secretariat of Public Education (Secretaría de Educación Pública)
SHCP	Ministry of Finance and Public Credit (Secretaría de Hacienda y
	Crédito Público)
SIGED	Education Management Information System (Sistema de
	Información y Gestión Educativa)
SPD	Professional Teaching Service (Servicio Profesional Docente)

Regional Vice President:	Jorge Familiar
Country Director:	Gerardo M. Corrochano
Senior Global Practice Director:	Claudia M. Costin
Practice Manager:	Reema Nayar
Task Team Leaders:	Rafael E. de Hoyos Navarro
	Raja Bentaouet Kattan

## MEXICO School Based Management Project

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Annex Annex	<ul> <li>D. Procurement</li> <li>E. Social</li> <li>F. Environmental (including Safeguards)</li> <li>1: Results Framework and Monitoring</li> <li>2: Detailed Project Description</li></ul>	14 14 15 .16 .25 .32
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## PAD DATA SHEET

## Mexico

Mexico School Based Management Project (P147185)

## PROJECT APPRAISAL DOCUMENT

## LATIN AMERICA AND CARIBBEAN REGION

## Report No.: PAD865

Basic Information						
Project ID EA Category Team Leader					Leader	
P147185		C - Not Required Rafael E. De Hoyos Navarro			E. De Hoyos Navarro	
Lending Instrument		Fragile and/	or Capacity Constrain	nts [ ]		
Investment Project Financ	ing	Financial Int	ermediaries [ ]			
		Series of Pro	jects [ ]			
Project Implementation St	art Date	Project Impl	ementation End Date	e		
02-Feb-2015		31-Dec-2018	3			
Expected Effectiveness Da	ate	Expected Cl	osing Date			
19-Jan-2015		31-Dec-2018	3			
Joint IFC						
No						
Practice Manager/Manager	Country Director Regional Vice President					
Reema Nayar	Claudia M	aria Costin	Gerardo M. Corro	chano	Jorge Familiar	
Borrower: United Mexica	n States					
Responsible Agency: Secr	etaria de E	ducacion Pub	lica			
Contact: Pedro	Velasco So	di	Title: Director	r Gener	al Adjunto de Gestion	
Telephone No.:			Email: pedro.v	elasco@	nube.sep.gob.mx	
	Project Financing Data(in US\$ Million)					
[X] Loan [] I	DA Grant	[] Gua	rantee			
[] Credit [] (	Grant	[] Oth	er			
Total Project Cost:	819.95	·	Total Bank Financ	ing:	350.00	
Financing Gap:	0.00					

Financing Source	ce						Amount
Borrower							469.95
International Bank for Reconstruction and Development			3				350.00
Total							819.95
Expected Disbu	rsements (in US\$ Mil	llion)					
Fiscal Year	2016	2	017	2018	3		2019
Annual	160.00	90.00		50.00	)		50.00
Cumulative	160.00	25	50.00	300.0	0		350.00
		Insti	tutional Data				
Practice Area /	Cross Cutting Solution	on Area					
Education							
<b>Cross Cutting A</b>	reas						
[] Climate C	Change						
[] Fragile, C	Conflict & Violence						
[] Gender							
[] Jobs							
[] Public Pr	ivate Partnership						
Sectors / Climat	e Change						
Sector (Maximur	n 5 and total % must e	equal 100	))				
Major Sector		Sector		%	Adaptatio Co-benefi		Mitigation Co-benefits %
Education		Primary	education	90			
Public Administr Justice	ation, Law, and	Public a Education	dministration- on	10			
Total				100			•
✓ I certify that	there is no Adaptation	on and M	Mitigation Clir	nate Cha	inge Co-ber	nefits	s information
applicable to thi	-		-		-		
Themes							
Theme (Maximu	m 5 and total % must	equal 10	0)				
Major theme		-	Theme			%	
Human developn	nent	Educ	ation for all			40	
Social dev/gende		Parti	cipation and civ	vic engagement 40			
Public sector governance     Managing for development results							

Total			100	
Proposed Development Objective(	s)			
The objective of the Project is to i reduce dropout, repetition and failure				rticipation t
Components				
Component Name			Cost (I	J <b>S\$ Million</b>
Increasing School Autonomy and Pa	rent Participation			342.0
Improving Schools' Managerial Capa	acity			3.5
Research and Innovation				3.6
	Compliance			
Policy			1 ·	· · ·
Does the project depart from the CA respects?	S in content or in other	significant	Yes [ ]	No [X
Does the project require any waivers	of Bank policies?		Yes [ ]	No [X
Have these been approved by Bank management?				No [X
Have these been approved by Bank r	nanagement?		Yes [ ]	L L
	-		Yes [ ]	No [X
Is approval for any policy waiver so	ught from the Board?	implementation?		No [X
Have these been approved by Bank r Is approval for any policy waiver sou Does the project meet the Regional c Safeguard Policies Triggered by th	ught from the Board? criteria for readiness for	implementation?	Yes [ ]	No [X
Is approval for any policy waiver sou Does the project meet the Regional of Safeguard Policies Triggered by th	ught from the Board? criteria for readiness for <b>ne Project</b>	implementation?	Yes [ ] Yes [ X ]	No [ X
Is approval for any policy waiver sou Does the project meet the Regional c	ught from the Board? criteria for readiness for <b>ne Project</b>	implementation?	Yes [ ] Yes [ X ]	No [ X   No [ ] No
Is approval for any policy waiver sou Does the project meet the Regional of <b>Safeguard Policies Triggered by th</b> Environmental Assessment OP/BP 4	ught from the Board? criteria for readiness for <b>ne Project</b>	implementation?	Yes [ ] Yes [ X ]	No [ X           No [ ]           No           X
Is approval for any policy waiver sou Does the project meet the Regional of <b>Safeguard Policies Triggered by th</b> Environmental Assessment OP/BP 4 Natural Habitats OP/BP 4.04	ught from the Board? criteria for readiness for <b>ne Project</b>	implementation?	Yes [ ] Yes [ X ]	No [ X           No [ ]           No           X           X
Is approval for any policy waiver sou Does the project meet the Regional of <b>Safeguard Policies Triggered by th</b> Environmental Assessment OP/BP 4 Natural Habitats OP/BP 4.04 Forests OP/BP 4.36 Pest Management OP 4.09	ught from the Board? criteria for readiness for ne Project .01	implementation?	Yes [ ] Yes [ X ]	No [ X           No [ ]           No           X           X           X           X
Is approval for any policy waiver sou Does the project meet the Regional of <b>Safeguard Policies Triggered by th</b> Environmental Assessment OP/BP 4 Natural Habitats OP/BP 4.04 Forests OP/BP 4.36 Pest Management OP 4.09 Physical Cultural Resources OP/BP	ught from the Board? criteria for readiness for ne Project .01	implementation?	Yes [ ] Yes [ X ]	No [ X           No [ ]           No           X           X           X           X           X           X           X           X           X           X           X
Is approval for any policy waiver sou Does the project meet the Regional of <b>Safeguard Policies Triggered by th</b> Environmental Assessment OP/BP 4 Natural Habitats OP/BP 4.04 Forests OP/BP 4.36 Pest Management OP 4.09 Physical Cultural Resources OP/BP 4 Indigenous Peoples OP/BP 4.10	ught from the Board? criteria for readiness for <b>ne Project</b> .01 4.11	implementation?	Yes [ ] Yes [ X ] Yes	No [ X           No [ ]           No           X           X           X           X           X           X           X           X           X           X           X
Is approval for any policy waiver sou Does the project meet the Regional of <b>Safeguard Policies Triggered by th</b> Environmental Assessment OP/BP 4 Natural Habitats OP/BP 4.04 Forests OP/BP 4.36 Pest Management OP 4.09 Physical Cultural Resources OP/BP 4.10 Indigenous Peoples OP/BP 4.10 Involuntary Resettlement OP/BP 4.1	ught from the Board? criteria for readiness for <b>ne Project</b> .01 4.11	implementation?	Yes [ ] Yes [ X ] Yes	No [ X         No         X         X         X         X         X         X         X         X         X         X         X         X         X         X         X         X         X         X
Is approval for any policy waiver sou Does the project meet the Regional of <b>Safeguard Policies Triggered by th</b> Environmental Assessment OP/BP 4 Natural Habitats OP/BP 4.04 Forests OP/BP 4.36	aught from the Board? criteria for readiness for <b>ne Project</b> .01 4.11	implementation?	Yes [ ] Yes [ X ] Yes	No [ X         No         X
Is approval for any policy waiver sou Does the project meet the Regional of <b>Safeguard Policies Triggered by th</b> Environmental Assessment OP/BP 4 Natural Habitats OP/BP 4.04 Forests OP/BP 4.36 Pest Management OP 4.09 Physical Cultural Resources OP/BP 4 Indigenous Peoples OP/BP 4.10 Involuntary Resettlement OP/BP 4.1 Safety of Dams OP/BP 4.37	aught from the Board? criteria for readiness for <b>ne Project</b> .01 4.11 2 OP/BP 7.50	implementation?	Yes [ ] Yes [ X ] Yes	No [ X         No         X
Is approval for any policy waiver sou Does the project meet the Regional of <b>Safeguard Policies Triggered by th</b> Environmental Assessment OP/BP 4 Natural Habitats OP/BP 4.04 Forests OP/BP 4.36 Pest Management OP 4.09 Physical Cultural Resources OP/BP 4.10 Indigenous Peoples OP/BP 4.10 Involuntary Resettlement OP/BP 4.1 Safety of Dams OP/BP 4.37 Projects on International Waterways	aught from the Board? criteria for readiness for <b>ne Project</b> .01 4.11 2 OP/BP 7.50	implementation?	Yes [ ] Yes [ X ] Yes	No [ X         No         X
Is approval for any policy waiver sou Does the project meet the Regional of <b>Safeguard Policies Triggered by th</b> Environmental Assessment OP/BP 4 Natural Habitats OP/BP 4.04 Forests OP/BP 4.36 Pest Management OP 4.09 Physical Cultural Resources OP/BP 4 Indigenous Peoples OP/BP 4.10 Involuntary Resettlement OP/BP 4.1 Safety of Dams OP/BP 4.37 Projects on International Waterways Projects in Disputed Areas OP/BP 7.	aught from the Board? criteria for readiness for <b>ne Project</b> .01 4.11 2 OP/BP 7.50	implementation?	Yes [ ] Yes [ X ] Yes	No [ X         No         X

Bank, for purposes of the carrying out of the Project, with each of the States. The Borrower, through SEP, shall exercise its rights and carry out its obligations under each Coordination Agreement. Schedule 2, I.A.2

Name	Recurrent	Due Date	Frequency
States' Obligations	X		CONTINUOUS

#### **Description of Covenant**

The Borrower, through SEP, shall cause each State to abide by all applicable Project provisions laid out in the Loan Agreement, including the carrying out of the Project in accordance to the Operational Manual (including the IPP and the Anti-Corruption Guidelines). Schedule 2, I.A.3

Name	Recurrent	Due Date	Frequency
Direct Support	X		CONTINUOUS

#### **Description of Covenant**

In order for a PEC School to receive a Direct Support: (i) the PEC School shall have entered into, and be in compliance with, an agreement with the relevant State (through its AEL) under terms and conditions set forth in the Operational Manual. Schedule 2, I.A. 4. (b)

Name	Recurrent	Due Date	Frequency
Organizational Structure	X		CONTINUOUS

#### **Description of Covenant**

The Borrower, through SEP, shall maintain and operate at all times during Project implementation an organizational structure acceptable to the Bank. Schedule 2, I.A.6 (a)

Name	Recurrent	Due Date	Frequency
Contrato de Mandato	X		CONTINUOUS

#### **Description of Covenant**

The Borrower, through SHCP and SEP, shall enter into a contract, satisfactory to the Bank, with NAFIN. The Borrower shall exercise its rights and carry out its obligations under the *Contrato de Mandato* in such a manner as to protect the interests of the Bank and to accomplish the purposes of the Loan. Schedule 2, I.B

Name	Recurrent	Due Date	Frequency
Trust Agreements	X		CONTINUOUS

#### **Description of Covenant**

The Borrower, through SEP, shall transfer the funds to finance Part 1 of the Project through the FNEC and through the relevant FEEC. The Borrower, through SEP, shall exercise its rights and carry out its obligations under the FNEC and under the FEECs in such a manner as to protect the interests of the Bank and to accomplish the purposes of the Loan. The Borrower, through SEP, shall ensure, and shall cause the States to ensure, through the exercise of the Borrower's voice and voting rights and the exercise of the State's voice and voting rights in the technical committees of the FNEC or the FEECs, as it may correspond, that Part 1 of the Project is carried out in accordance with the provisions of this Agreement (including the Anti-Corruption Guidelines provisions and the IPP). Schedule 2, I.C

Name	Recurrent	Due Date	Frequency
Anti-Corruption	X		CONTINUOUS

#### **Description of Covenant**

The Borrower shall ensure that the Project is carried out in accordance with the provisions of the Anti-Corruption Guidelines. Schedule 2, I.D.1

Name	Recurrent	Due Date	Frequency
Anti-Corruption Notice to States	X		CONTINUOUS

#### **Description of Covenant**

The Borrower, through SEP, shall issue a notice (*Oficio*) acceptable to the Bank asking the States to comply with transparency and anti-corruption provisions, and stating that once the States have deposited funds in the relevant FEEC, such deposit will be interpreted as a tacit acceptance of the *Oficio*'s transparency provisions. Schedule 2, I. D.2

Name	Recurrent	Due Date	Frequency
Anti-Corruption Notice to FNECs and FEECs	X		CONTINUOUS

#### **Description of Covenant**

The Borrower, through SEP, shall issue a notice to the financial institutions that administer the funds under the FNEC and FEECs informing them of the existence of the Anti-Corruption Guidelines. Schedule 2, I.D.3

#### Conditions

Source Of Fund	Name	Туре
IBRD	Contrato de Mandato	Effectiveness

#### **Description of Condition**

The Contrato de Mandato has been duly executed by the Parties thereto. (Article V, 5.01 (a))

Source Of Fund	Name	Туре
IBRD	Issuance of Anti-Corruption Notice	Effectiveness

#### **Description of Condition**

(i) The *Oficio* referred to in Section I.D.2 of Schedule 2 to the Loan Agreement has been issued; and (ii) at least on State has (A) deposited funds in the relevant FEEC as a tacit acceptance of the *Oficio*'s transparency provisions, or (B) issued a note to SEP agreeing to comply with transparency provisions acceptable to the Bank. Article V, 5.01 (b)

Source Of Fund	Name	Туре
IBRD	Legal Opinions	Effectiveness

#### **Description of Condition**

(a) the Borrower, through SHCP and SEP (in separate legal opinions -1 for SHCP and 1 for SEPsatisfactory to the Bank, issued by Borrower counsel acceptable to the Bank), indicates that the *Contrato de Mandato* has been duly authorized or ratified by, and executed and delivered on behalf of, the Borrower, and is legally binding upon the Borrower in accordance with the *Contrato de Mandato*'s terms; and (b) NAFIN, through a legal opinion satisfactory to the Bank, issued by NAFIN counsel acceptable to the Bank, indicates that the *Contrato de Mandato* has been duly authorized or ratified by, and executed and delivered on behalf of, NAFIN and is legally binding upon NAFIN in accordance with the terms of *Contrato de Mandato*. Article V, 5.02 (a)

			Team Co	ompo	sition		
Bank Staff							
Name		Title		Spec	cialization		Unit
Fabiola Alti	mari Montiel	Senior C	Counsel	Seni	or Counse	l	LEGLE
Raja Bentao	uet Kattan	Program	1 Leader	Co-7	Fask Team	Leader	GEDDR
Wendy Cun	ningham	Program	n Leader	Sect	or Leader		LCC1C
Rafael E. De Navarro	e Hoyos	Senior H	Economist	Task	t Team Lea	ader	GEDDR
Jimena Garr	ote	Senior C	Counsel	Seni	or Counsel	l	LEGLE
Gabriela Gri	nsteins	E T Cor	sultant	ΕT	Consultant	-	LEGLE
Abril Alicia Castaneda	Ibarra	E T Cor	sultant	Educ	cation Spec	cialist	GEDDR
Nancy Mont	es de Oca	Team A	ssistant	Tear	n Assistan	t	LCC1C
Reema Naya	ır	Practice	Manager	Sect	or Manage	r	GEDDR
Antonella N	ovali	Program	n Assistant	Prog	gram Assist	tant	GEDDR
Victor Manu Conde	iel Ordonez	Senior F	Finance Officer	Senior Finance Officer		Officer	CTRLN
Gabriel Pena	aloza	Procure	ment Specialist	Proc	urement S	pecialist	GGODR
Juan Carlos Machorro	Serrano-	Sr Finar Manage	icial ment Specialist		inancial agement S	pecialist	GGODR
Non Bank S	Staff	•		<b>.</b>			•
Name			Title			City	
Locations							
Country	First Administ Division	rative	Location		Planned	Actual	Comments
Mexico	Yucatan		Estado de Yuc	atan	X	X	
Mexico	Veracruz-	Llave	Estado de Veracruz-Llave		X	X	
Mexico	Tlaxcala		Estado de Tlay	kcala	X	X	
Mexico	Tamaulip	as	Estado de Tamaulipas		X	X	
Mexico	Tabasco		Estado de Tab	asco	X	X	

Mexico	Quintana Roo	Estado de Quintana Roo	X	X	
Mexico	Queretaro	Estado de Queretaro de Arteaga	X	X	
Mexico	Puebla	Estado de Puebla	X	X	
Mexico	Oaxaca	Estado de Oaxaca	X	X	
Mexico	Nuevo Leon	Estado de Nuevo Leon	X	X	
Mexico	Morelos	Estado de Morelos	X	X	
Mexico	Mexico	Estado de Mexico	X	X	
Mexico	Hidalgo	Estado de Hidalgo	X	X	
Mexico	Guerrero	Estado de Guerrero	X	X	
Mexico	The Federal District	Distrito Federal	X	X	
Mexico	Chiapas	Estado de Chiapas	X	X	
Mexico	Campeche	Estado de Campeche	X	X	
Mexico	Zacatecas	Estado de Zacatecas	X	X	
Mexico	Sonora	Estado de Sonora	X	X	
Mexico	Sinaloa	Estado de Sinaloa	X	X	
Mexico	San Luis Potosi	Estado de San Luis Potosi	X	X	
Mexico	Nayarit	Estado de Nayarit	X	X	
Mexico	Michoacan	Estado de Michoacan de Ocampo	X	X	
Mexico	Jalisco	Estado de Jalisco	X	X	
Mexico	Guanajuato	Estado de Guanajuato	X	X	
Mexico	Durango	Estado de Durango	X	X	
Mexico	Colima	Estado de Colima	X	X	
Mexico	Coahuila	Estado de Coahuila de Zaragoza	X	X	
Mexico	Chihuahua	Estado de Chihuahua	X	X	
Mexico	Baja California Sur	Estado de Baja California Sur	X	X	

Mexico	Baja California	Estado de Baja California	X	X	
Mexico	Aguascalientes	Estado de Aguascalientes	X	X	

### I. STRATEGIC CONTEXT

### A. Country Context

1. **Prudent economic policies in Mexico over the past two decades contributed to the progressive attainment of macroeconomic stability and a synchronization of the business cycle with the country's main trading partners.** After the 2008-09 global financial crisis, Mexico's economy rebounded quickly, reaching an average growth rate of 4.4 percent between 2010 and 2012. More recently, a global economic slowdown contributed to a deceleration of economic growth to 1.1 percent in 2013. While the weakness in economic activity extended well into the first half of 2014, growth is expected to rebound during the second half of the year, leading to a growth projection for 2014 of 2.3 percent and a further cyclical recovery over the next couple of years.

2. Despite weathering these recent crises, Mexico's long-term economic growth has been somewhat below expectations, limiting a rise in average living standards and more rapid progress on poverty reduction. Mexico is an upper middle-income country and a member of the OECD and the G20. In 2013, its GNI per capita was approximately 39 percent of the level observed in high income OECD countries, the same proportion observed two decades ago, signaling a lack of progress in economic convergence. Over the past three decades, annual GDP growth averaged 2.4 percent and only 0.8 percent per capita. Growth decomposition exercises point to insufficient average productivity growth as the main cause of the less than satisfactory growth performance. An underdeveloped financial system, labor market rigidities, high informality, scarce skilled labor, regulatory barriers for doing business, and weak innovation and limited market competition in key input sectors such as telecommunications and energy are often cited as constraints to productivity growth.

3. A long-term view of poverty shows that monetary poverty has not decreased in the last decade, with 2012 rates similar to the rates in 2002. The monetary (income) measure of poverty, for which long term trends are available in Mexico, shows that poverty has not changed significantly in the last decade and has actually slightly increased from 50.0 in 2002 to 52.3 percent in 2012. In particular, monetary poverty rose significantly between 2006, when it had reached 42.9 percent, and 2012, breaking the previous decade-long trend of poverty reduction.

4. **Multi-dimensional poverty and extreme poverty declined in recent years, although opportunities to earn an income remain limited for the poor**. Mexico was the first country in Latin America to adopt a multi-dimensional Poverty Index as its official poverty measure in 2008. The multidimensional poverty measure was defined by the National Evaluation Council (CONEVAL) as a combination of income poverty and a set of deprivations (nutrition, education, social security, basic services, access to health services, and quality and space of the dwelling). According to this multidimensional measure, poverty and extreme poverty declined from 46.1 percent to 45.5 percent and from 11.3 percent to 9.8 percent, respectively, between 2010 and 2012 (53.3 million poor and 11.5 million extremely poor in 2012). This decline is largely due to an increased access to social services, particularly health care. Poverty among the indigenous population has fallen faster, but their poverty levels (72.3 percent) remain significantly higher than among non-indigenous populations.

5. **Implementation of an ambitious structural reform agenda introduced by the current administration has the potential to raise productivity and unleash growth in the medium term**. Over the past two years, major progress has been achieved on the enactment of legislative changes in the areas of labor market regulation, education, telecommunication and competition policy, financial sector regulation, energy, and fiscal policy. Additionally, the Government of Mexico's (GoM) National Development Plan (NDP) for 2013-18 has five main components: Peace, Inclusion, Quality of Education, Prosperity, and Global Responsibility. A main priority for the growth and development of Mexico emphasized both in the reform process and in the NDP is improving the quality of education, reducing access and achievement gaps between rich and poor to increase productivity, and long term growth while reducing social inequalities. The Government currently faces significant challenges to implement these reforms with numerous new regulatory agencies being created. There is a clear potential for these reforms to enhance potential output growth, which is currently estimated in the range of 2.5-3.0 percent.

### **B.** Sectoral and Institutional Context

6. **Mexico has made significant progress in basic education coverage, particularly in primary and lower secondary education, but there are still students left out of school**. There are around 25.9 million students in basic education: 4.8 million attend preschool, 14.8 million attend primary, and 6.3 million attend lower secondary school (henceforth secondary school). Net coverage is 87 percent for preschool (5 year olds), 96 percent at primary (6 to 12 year olds), and 87 percent for secondary (12 to 14 year olds). Gross enrollment is 71, 109, and 93, respectively.<sup>1</sup>

7. Some education indicators are looking better for primary than for secondary. Dropout rates in primary are quite low, with 0.6 percent of students leaving school; however, in secondary this percentage is approximately nine times larger (5.3 percent). Similarly, repetition in primary has more than halved from 5.2 percent in 2003-04 to 2.1 percent in 2012-13, but at the secondary level it continues to be high at 7.1 in 2012-13 (although repetition has also decreased).

8. Low learning outcomes comprise the biggest challenge faced by the country's education system. Student learning, as measured by international standardized tests, lags behind other OECD countries. Mexico's 2012 PISA scores place it in the last position among OECD countries and in 53rd out of the 65 participating countries. Mexico has slightly improved its Mathematics results in PISA over time (from 387 in 2000 to 413 in 2012), but reading results have stagnated (from 422 in 2000 to 424 in 2012). The national standardized assessment, the National Evaluation of Academic Achievement in Schools (*Evaluación Nacional del Logro Académico de Centros Escolares*, ENLACE, currently under revision), also highlights low learning outcomes of Mexican students. In 2013, the last year of ENLACE's administration, 57 and 80 percent of primary and secondary students, respectively, obtained "Insufficient" or

<sup>&</sup>lt;sup>1</sup> Percentages over 100 are usually due to construction of the indicator based on two different data sources: the students' registrar and the estimation of children of school age. The figures might also differ because the latter are based on CONAPO projections from April 2013.

"Basic" achievement levels in Spanish and 51 and 78 did so in Mathematics, respectively. There are also important differences in educational attainment within the country. For instance, in 2013, only 28 percent of students enrolled in primary indigenous schools scored "Good" or "Excellent" in ENLACE, as opposed to 44 percent for those enrolled in general schools.

9. The Education Reform to improve the quality of education is one of the 2012-18 administration's priorities. A Constitutional Amendment (February 7, 2013) resulted from the political will and coalition stemming from the Pacto por México, signed by the President and the leaders of three major political parties on December 2, 2012.<sup>2</sup> The reform has been linked to the National Development Plan (NDP) for 2013-18 and benefited from wide consultations.<sup>3</sup> It is likely to be the most important education reform in the country's recent history. The reform aims to improve the quality of education through: i) establishing a professional system for hiring, evaluating, training, and promoting teachers (Servicio Profesional Docente, SPD) and a new unit within the Secretariat of Public Education (Secretaría de Educación Pública, SEP) to coordinate it; ii) providing full autonomy to the National Institute for the Evaluation of Education (Instituto Nacional para la Evaluación de la Educación, INEE) to oversee all evaluation functions throughout the education system, including the performance of students, teachers, school directors, supervisors, and schools; (iii) establishing a federal census of education data and a national Education Management Information System (Sistema de Información y Gestión Educativa, SIGED); and (iv) fostering school autonomy and school based management, among other goals. The articulation between the different elements of the reform will be crucial for achieving the expected results. In order to implement the reform, the Government recently published the Education Sector Program (Programa Sectorial de Educación, PSE) 2013-18, which provides clear strategies and implementation arrangements to achieve the education objectives defined in the NDP.

10. The Constitutional amendment calls for adjustments to the legal framework for strengthening school based management and autonomy, with the goal of improving school infrastructure, purchasing educational materials, and solving basic operational problems, while promoting social participation so that students, teachers and parents, under the school director's leadership, can solve the challenges each school faces.<sup>4</sup> Similarly, the modifications to the General Law of Education state that school based management programs should: use evaluation results as feedback for continuous improvement; develop annual school plans describing activities and verifiable targets (shared with the education authority and the school community);

<sup>&</sup>lt;sup>2</sup> Signed by *Partido Revolucionario Institucional, PRI, Partido Acción Nacional, PAN* and *Partido de la Revolución Democrática, PRD*, http://www.animalpolitico.com/2012/12/los-cinco-acuerdos-del-pacto-por-mexico/

<sup>&</sup>lt;sup>3</sup>The Government has conducted extensive consultations with different stakeholders and the general public that show concern for and willingness to improve the quality of education in Mexico. As part of the strategy to develop the National Development Plan 2013-18 (*Plan Nacional de Desarrollo 2013-18*), a consultation forum was launched from February to May 2013 to incorporate citizens' proposals and views into the plan. The results of the consultation show that improvement of the education system is a top priority for most of the 228,949 people consulted. In addition, better trained and evaluated teachers, school directors, and school supervisors are perceived by citizens as the key for improving the quality of education in Mexico (*Primer informe de gobierno de Enrique Peña Nieto* (September 2013)).

<sup>&</sup>lt;sup>4</sup> Reforma Educativa. Transitorio Quinto, Apartado III

and transparently and efficiently administer the direct resources that the school receives.<sup>5</sup> In addition, the SPD Law explicitly devolves responsibility to school directors for verifying that teachers meet the adequate profile and for pointing out any incompatibility with the needs of the school.<sup>6</sup> If such inconsistencies are confirmed, the educational authorities are compelled to replace teachers.

11. **Schools are at the center of the reform agenda**. One of the PSE's main objectives is to ensure quality learning in basic education for all.<sup>7</sup> It does so through seven national strategies, three of which focus on schools as the units of change and improvement. These include:

- Creating the conditions for schools to be at the center of the education system, allowing them to receive the support needed to achieve their objectives. This requires coordinating federal and state efforts to ensure that schools achieve minimum standards (*normalidad mínima*); introducing new mechanisms for allocating direct support to schools to empower their decision-making process; and removing administrative requirements and programs that distract schools from their substantive (pedagogical) functions.
- Increasing school management capacity to improve learning outcomes. This requires: boosting each teacher's commitment to and expectations of student learning; concentrating schools' efforts on teaching and learning with a focus on academic achievement; developing school management standards as a benchmark for performance, evaluation and improvement; strengthening leadership of school directors and supervisors; ensuring that school directors and teachers work collaboratively through the *Consejos Técnicos Escolares* (CTE) and with the school community through the *Consejos Escolares de Participación Social* (CEPS); providing targeted support to schools based on their needs and managerial capacities; and establishing rules to simplify school budget reporting.
- Strengthening the relationship between the school and the broader community to promote social participation, transparency in resource usages, and accountability. This requires: promoting school communication with parents to collaborate with the school and build a respectful and violence-free environment; ensuring that the basic features of the curriculum are understood by families; and ensuring mechanisms for information and accountability to the community through the CEPS.

12. Secondary legislation to enact the Constitutional mandate of strengthening school based management was recently published. The legislation defines the norms or guidelines that all programs aiming to strengthen school based management should follow. Broadly speaking, the guidelines define the following:

- a. Objectives, responsibilities and legal attributes of schools (directors and teachers), school supervisors, and local (State) education authorities.
- b. The mandatory use of various evaluation results as inputs for school improvement plans

<sup>&</sup>lt;sup>5</sup>Ley General de Educación. Artículo 28 Bis.

<sup>&</sup>lt;sup>6</sup> Ley del Servicio Profesional Docente, Articulo 63.

<sup>&</sup>lt;sup>7</sup> <u>http://www.dof.gob.mx/nota\_detalle\_popup.php?codigo=5326569</u>

- c. The elements that should be included in the mandatory school improvement plans
- d. The administration of additional financial resources at the school level within a framework that promotes transparency and accountability
- e. The need to promote an active participation of school agents (teachers and students) and social participation (parents' association and the community at large).

13. The guidelines for school based management are based on lessons learned from more than 13 years of the *Programa Escuelas de Calidad* (PEC). PEC has operated in Mexico since 2001, through the Sub-secretariat of Basic Education (*Subsecretaría de Educación Básica*, SEB) and has been supported by the Bank since 2006. PEC provides direct support and technical assistance to basic education schools (pre-primary, primary and lower secondary), subject to the design and implementation of a school improvement plan. The school council, consisting of the school director, teachers, and parent representatives, is responsible for the design and accurate implementation of school improvement plans supported by the program.

14. The policy of strengthening school based management is currently implemented through several national programs, among others, PEC and the *Programa Escuelas de Tiempo Completo* (PETC). In 2007-08, SEP introduced PETC in basic education to increase the number of school-day hours and promote school based management following the PEC scheme. The PETC's school based management component is exactly the same as PEC's and follows the guidelines for school based management described above, but the model also includes extra instruction time, free meals (in schools in highly marginalized areas), and additional learning materials. The two programs share the goal of contributing to students' learning within a framework of more school autonomy, the use of evaluations to improve pedagogical strategies, better managerial capacities at the school level, and active social participation.

15. Evidence shows that PEC has improved social participation, governance, transparency, and accountability and this has led to lowering dropout and repetition rates (Murnane, Willet and Cardenas (2006); Gertler, Patrinos and Rubio-Codina (2012)). However, the existing evaluations show, at best, limited effects of PEC on learning outcomes – as measured by the national standardized test, ENLACE. The most recent international evidence suggests that promoting school autonomy and school based management can translate into higher quality of education services if schools have a minimum institutional capacity (Hanushek, Link and Woessmann (2013)). Data for Mexico shows a strong and significant correlation between school directors' managerial practices and learning outcomes in Mathematics and Spanish, in line with international evidence (Bloom et al., 2014). Therefore, among other things, this Project would support the GoM in their goal of improving school directors' managerial skills to enable a positive relationship between school based management and education outcomes.

### C. Higher Level Objectives to which the Project Contributes

16. The higher level objective of the proposed Project is to improve the quality of education services in public basic education schools in Mexico. The proposed Project contributes to the Bank's twin goals of eliminating extreme poverty and boosting shared prosperity by improving learning outcomes and retention rates among students in public schools, particularly those from marginalized areas, through strengthened school based management. Recent evidence shows that school based management programs can be an effective strategy to

increase parental participation in school decisions; reduce dropout, repetition and failure rates (Gertler, Patrinos and Rubio-Codina (2012)); and, under certain conditions, increase learning outcomes (Santibañez, Abreu and O'Donoghue (2014)).<sup>8</sup> The proposed Project would directly contribute to strengthening the link between school based management and education outcomes (promotion, passing and retention rates during the lifetime of the proposed Project, and, in the medium-to-longer-term, learning outcomes) through the development of strategies to improve schools' managerial capacities.

17. The proposed operation is an important component of services put forward in the World Bank Group's Country Partnership Strategy (CPS) for FY14-FY19 (Report No. 83496), discussed by the Executive Directors on December 12, 2013, which is fully aligned with the goals of Mexico's NDP for 2013-18. The program fits under CPS theme II "Increasing Social Prosperity," under the fifth area of engagement "Promoting Labor Markets for Inclusive Growth," which has the expected outcome of "improved learning outcomes and enrollment." The Figure below depicts Bank engagement in Mexico's education sector.

<sup>&</sup>lt;sup>8</sup> Santibañez, Abreu and O'Donoghue (2014) show that PEC-FIDE, a spin-off of PEC that provided differentiated school grants based on school enrollment, had positive effects on Spanish test scores for students in 3<sup>rd</sup> grade.

	Stages of Engagement in Education in Mexico					
	Foundations and early support [1995–2003]	Broadening engagement [2004–2009]	Expanding support [2009-2013]	Consolidation [2013-beyond]		
Know ledge Services		<ul> <li>Education Quality (2005)</li> <li>Enhancing Productivity, Knowledge, and Competitiveness in Mexico (2006)</li> <li>Education Quality II (2006)</li> <li>Mexican Alliance for Education Quality (2009)</li> <li>Secondary Education (2008)</li> </ul>	<ul> <li>Nuevo Leon Technical Assistance (2010)</li> <li>Colima Evaluation (2010)</li> <li>PSIA analysis of the Upper Secondary Education Reform (2011)</li> <li>Improving Skills for Enhanced Labor Market Productivity PKS (P128775, 2012-13)</li> </ul>	<ul> <li>Supporting Education Evaluation Agenda (P150318, 2014-16)</li> <li>SIEF evaluations for private school and APIs</li> </ul>		
Financial Services	<ul> <li>Primary Education Project (1991)</li> <li>Initial Education Project (1992)</li> <li>Primary Education Project II (1994)</li> <li>Basic Education Development Project (P040199, US\$115 million, 1998)</li> <li>Higher Education Financing Project (P049895, US\$180.2 million, 1998)</li> <li>Knowledge and Innovation Project (P044531, US\$300 million, 1998)</li> <li>Basic Education Development Project II (P057531, US\$300 million, 2002)</li> </ul>	Development Project III (P85851, US\$ 300 million, 2004) Education Quality Project (APL I) (P088728, US\$240 million, 2005) Innovation for Competitiveness (P089865, US\$250 million, 2005) Tertiary Education Student Assistance Project	<ul> <li>Upper Secondary Education DPL (P112262, US\$700 million, 2010)</li> <li>School-based Management PEC APL II) (P115347, US\$220 million, 2010)</li> <li>Compensatory Education CONAFS (P101369, US\$100 million, 2010)</li> <li>Upper Secondary Education DPL II (P126297, US\$300 million, 2012)</li> </ul>	<ul> <li>Upper Secondary Education DPL III (P147244, US\$300 million, 2014)</li> <li>School Based Management Project (P147185, US\$350 million, 2015)</li> <li>Reducing Insequality of Educational Opportunity (P149858, US\$150 million, 2015)</li> </ul>		
Convening Services			<ul> <li>Dissemination event of report: "Opening Up the Black Box: Assessing Teacher and Student Practices in the Classroom" (June 2012)</li> <li>Dissemination of study: "Educación Superior y Desarrollo en Oaxaca" (February 2013)</li> <li>Presentation to SEMS: "La Educación Media Superior Después de 5 años de Reforma" (April 2013)</li> <li>Learning exchange on Upper Secondary Education during a visit of SEMS authorities to World Bank Headquarters (May 2013)</li> <li>Workshop: "Seminario de Buenas Prácticas en Autonomíay Gestión Escolar" (June 2013)</li> </ul>	<ul> <li>Workshop on dropout rates in upper secondary education in Mexico and to present an international analysis on strategies to reduce dropouts (July 2013)</li> <li>Workshop on Teachers Policies with a focus on improving in-service teacher training in upper secondary (July 2013)</li> </ul>		
	CAS 95-97, 97-99, 99-02, 02-05	FY03-07 CPS	FY08-13 CPS	FY14-19 CPS		

## Figure 1: Bank Engagement in Education in Mexico.

#### **II. PROJECT DEVELOPMENT OBJECTIVES**

## A. Project Development Objective

18. The objective of the Project is to improve schools' managerial capacity and parental participation to reduce dropout, repetition and failure rates among PEC Schools and PETC Schools.

### **B.** Project Beneficiaries

19. The proposed Project would benefit over 8 million basic education students enrolled in approximately 50,000 schools that are part of the PEC program and 23,000 schools currently participating in the PETC. An additional 17,000 PETC schools are expected to benefit from the proposed Project by 2018. This represents around a third of the total student population enrolled in basic education. Primary beneficiaries would be students in preschool, primary, and lower secondary. Teachers, directors, supervisors, and families, as well as the national and state secretaries of education, would benefit from strengthened managerial capacity in a system where schools have more legal attributes and resources to take the necessary decisions to improve the quality of education services.

20. In 2013, 30 percent of the total number of indigenous schools was supported by PEC and PETC (3,500 and 2,314, respectively). While PEC's eligibility rules do not include a strong targeting criterion of basic education schools located in marginalized or indigenous areas, PETC's do. Therefore, as schools participating in the PETC progressively incorporate into the Project's beneficiaries through technical assistance to improve managerial capacities, prioritization of the population located in marginalized and indigenous areas would increase.

## C. PDO Level Results Indicators

- 21. The proposed Project would have the following results indicators:
  - i. Proportion of basic education schools in programs to strengthen school based management (PEC and PETC) with a director that has a "sufficient" level of managerial capacity.
  - ii. Proportion of basic education schools in PEC with parents' associations participating in the design, monitoring, and adjustment of the school improvement plan.
  - iii. Dropout rate among basic education schools in programs to strengthen school based management (PEC and PETC).
  - iv. Gross failure rate among basic education schools in programs to strengthen school based management (PEC and PETC).
  - v. Repetition rate among secondary school students in schools in programs to strengthen SBM (PEC, PETC).

## **III. PROJECT DESCRIPTION**

## A. Project Components

22. The proposed Project consists of the following components:

## Component 1: Increasing School Autonomy and Parent Participation (US\$342.000 million)

23. Provision of Direct Support to PEC Schools to implement Improvement Plans. The school improvement plans (*Ruta de Mejora*) need to be discussed and agreed with parent associations. At the request of the GoM, this component would only include PEC schools.

- a. <u>Eligibility criteria</u>. Having a school improvement plan (*ruta de mejora*) is mandatory to participate in PEC. Priority is given to schools serving marginalized and vulnerable populations<sup>9</sup> and those with low achievement levels in the national standardized test and high dropout rates.
- b. <u>School improvement plan.</u> This is a strategic plan whereby the school's technical council (*Consejo Técnico Escolar*, CTE) identifies the school's main challenges, goals, and means to reach them.
- c. <u>Direct support to schools</u>. The amounts are defined by a resource allocation formula using two criteria: exogenous conditions and performance in quality indicators
- d. <u>The use of direct support to schools.</u> These resources are used to support activities related to the school improvement plans, as opposed to recurrent costs of the school's everyday functioning.

## Component 2: Improving Schools' Managerial Capacity (US\$3.500 million)

24. Provision of technical assistance to PEC Schools and PETC Schools to strengthen schoolbased management through:

- a. Support for the development of a school dashboard for schools' supervisors and directors including, *inter alia*, performance indicators and best practices.
- b. Support for: (a) the development and implementation of a capacity building strategy for school directors and supervisors on: (i) the use of the school dashboard and its role in improving school management practices; and (ii) the use of a classroom observation method; (b) the improvement of schools' managerial practices through the development and implementation of capacity building activities for parents; and (c) the development of the information system needed to keep the schools' dashboards running, relevant, and up to date, including the preparation of guidelines describing an implementation and maintenance protocol for said dashboards.

### **Component 3: Research and Innovation (US\$3.625 million)**

25. Provision of support for the development of a new instrument to measure PEC Schools and PETC Schools' managerial capacity, through the piloting, redesign (if necessary), implementation, and comparison of alternative questionnaires to measure said managerial capacity.

26. Provision of support to States to improve adherence to PEC's Operational Rules through the carrying out of workshops and knowledge exchange activities.

27. Provision of support for the carrying out of an assessment in at least two self-selected States which will estimate and quantify the effect of the intervention supported by the Project

<sup>&</sup>lt;sup>9</sup> Located in zones where the National Program for Social Prevention of Violence and Crime and the National Crusade against Hunger operate, as well as schools operating in marginalized areas and serving indigenous populations.

through PEC and PETC.

## **B.** Project Financing

### Lending Instrument

28. The lending instrument for this Project would be Investment Project Financing in the amount of US\$350 million.

Project Components	Project Cost (US\$ million)	IBRD Financing (US\$ million)	% Financing
1. Increasing School Autonomy and Parent Participation	804.000	342.000	42.5%
2. Improving Schools' Managerial Capacity	9.650	3.500	36.3%
3. Research and Innovation	5.425	3.625	66.8%
4. Front End Fee	0.875	0.875	100%
Total Financing Required	819.950	350.000	

## **Project Cost and Financing**<sup>10</sup>

## C. Lessons Learned and Reflected in the Project Design

29. The most recent international evidence suggests that promoting school autonomy and school based management can translate into higher quality of education services if schools have a minimum institutional capacity (Hanushek, Link and Woessmann (2013)). In addition, recent evidence also shows the importance of managerial practices on student performance (Di Liberto, Schivardi and Sulis (2013) and de Hoyos, Garcia and Patrinos (2014)). Therefore, the Project would focus on creating the conditions in which the transfer of resources and legal attributes to the schools under the school based management policy can translate into improvements in the quality of education service delivery.

30. Evidence also shows that PEC has improved social participation, governance, transparency, and accountability, and this has led to lowering dropout and repetition rates (Murnane, Willet and Cardenas (2006); Gertler, Patrinos and Rubio-Codina (2012). The proposed Project would therefore continue to foster social participation around the school improvement plans and through linkages with CTEs and CTPSs. A key innovation in the design is a component to support schools' and school directors' managerial capacities, in line with the above evidence.

<sup>&</sup>lt;sup>10</sup> The overall financing costs do not include those associated with PETC.

31. The Project design would include evaluations of PEC and PETC to better examine the impact of these programs on student learning. Undertaking rigorous impact evaluations of PEC under previous Bank projects (and more generally in the past) has proven challenging due to several aspects: i) including the self-selection of schools into the program (introducing selection biases into conventional non-randomized evaluation approaches); ii) delays associated with complexity in Bank and national procurement guidelines; and iii) a lack of technical assistance to design the evaluations well in advance before the start of the proposed Project. Taking these lessons into account, both the Bank and the counterpart have: i) started the design of the evaluation early (at Project preparation); ii) reduced the evaluation from national to State level (in those states that are willing to set an experimental design); and iii) worked with the procurement specialist to ensure that the support for this and other technical activities can be disbursed in a timely manner.

32. In terms of Project implementation from the two previous Bank projects supporting PEC, it was also found that *Autoridad Educativa Local*, (Local Education Authorities AEL) play an important role in both planning and implementing the PEC program on the ground. Moving forward, the Bank would support the GoM in establishing clear rules and criteria to guide the program and, at the same time, ensure that there is sufficient flexibility to have State-level variation in implementation.

## **IV. IMPLEMENTATION**

### A. Institutional and Implementation Arrangements

33. **The Project would be implemented by SEP**, through the General Directorate of Management Development and Education Innovation *Dirección General de Desarrollo de la Gestión e Innovación Educativa* (General Directorate of School Management and Education Innovation, DGDGIE), which manages both PEC and PETC. These programs are carried out at the state level by AELs, in coordination with the DGDGIE and in compliance with the Programs' Operating Rules, which serve as guidelines for schools and states implementing the program.

34. **SEP's capacities for the execution of a Bank loan have been successfully proven**. Implementation challenges remain, however, especially the need for clarity and structure and the flexibility to account for variations in operations and procedures between and across levels (federal, state and school). Both the GoM and the Bank team are working on developing and implementing mitigation strategies to ensure the transparency and effectiveness of the Project.

35. *Nacional Financiera, S.N.C, I.B.D.* (NAFIN) would act as the financial agent for the **Borrower**, managing loan disbursements and overseeing and supporting project implementation. The flow of funds and flow of information (presented in detail in Annex 3) would be carried out, whenever possible, using the country's mechanisms and systems. A Subsidiary Contract (*Contrato de Mandato*) would be established between SEP, SHCP, and NAFIN to define the responsibilities of each party in achieving the proposed Project's objectives.

### **B.** Results Monitoring and Evaluation

36. Progress towards achieving the PDO would be monitored by the DGDGIE, which would be responsible for collecting and compiling the data on all indicators presented in Annex 1. The DGDGIE would send Biannual Progress Reports to the Bank, including on progress toward targets in the Results Framework. The DGDGIE would also be responsible for the assessment of the programs, as well as research and innovation (for more information on the monitoring and evaluation process, please refer to Annex 3).

### C. Sustainability

37. The proposed Project builds on a successful track record of implementing SBM through the PEC program in two previous projects and the growing awareness of the public, which now recognizes the importance of school based management for improving the quality of education in Mexico. In particular, sustainability is closely linked to ownership of the proposed Project at both the government and community levels. The long-term Government commitment to support SBM is clear in its prioritization under the constitutional reform agenda and the expansion of SBM programs implemented by SEP. At the local level, the proposed Project's focus on expanding schools' managerial capacity and community involvement through school improvement plans is important for sustainability. Furthermore, the long-term sustainability of the proposed Project is strengthened by the design of the Project, which now aims to broaden the gains under the Mexico Education Quality Project (P088728, Ln. 7347-MX) and the Mexico School Based Management Project - APL II (P115347, Ln. 7948-MX) into a system-wide approach to support SBM beyond only the PEC program. Additionally, the focus on rigorous assessments in the Project design would help ensure that interventions can be sustained over the long term and survive political transitions, bolstered by a solid evidence base.

## V. KEY RISKS AND MITIGATION MEASURES

### A. Risk Ratings Summary Table

Risk Category	Rating
Stakeholder Risk	Moderate
<b>Operating Environment Risks</b>	
- Country	Moderate
- Sector and Multi-Sector	Moderate
Implementing Agency Risks	
- Capacity	Moderate
- Governance	Low
- Fraud and Corruption	Low
Project Risk	
- Design	Moderate
- Social and Environmental	Moderate
- Program and Donor	Low
- Delivery Monitoring and Sustainability	Moderate
Overall Implementation Risk	Moderate

#### **B.** Overall Risk Rating Explanation

38. The overall risk rating of the proposed Project is assessed as Moderate since most of the risks are moderate, with the exception of the Governance and Fraud and Corruption risks that have been rated as Low. The major risk to the proposed Project is that the relevant stakeholders may lack the capacity to exercise the rights and responsibilities regarding SBM and autonomy (including the adequate use of direct support to schools), as stipulated by the Education Reform. To mitigate these risks, the proposed Project would provide school supervisors and school directors with tailored technical support and capacity building activities. Support to principals would also focus on improving their managerial skills and their ability to encourage social participation.

### VI. APPRAISAL SUMMARY

### A. Economic and Financial Analysis

39. The economic and financial analysis addresses three key questions: i) What is the proposed Project's development impact?; ii) Is public sector provision or financing the appropriate vehicle?; and iii) What is the World Bank's value added? It is expected that as more Project beneficiaries enter the labor market and the additional years of schooling and learning achievement of the workforce increases, the economic benefits of the proposed Project would also increase. According to the most recent evidence, an additional year of schooling increases incomes by 5 per cent among indigenous population and those located in rural areas. By increasing years of schooling among non-rich individuals located in urban areas, those located in rural areas and indigenous, public sector provision is justified based on investment's high social returns and the reductions in poverty and inequality associated with it. The Bank's contribution includes ensuring appropriate support of the GoM's strategy to strengthen SBM through direct support and technical assistance to schools; contributing to the design of interventions to improve schools' managerial capacity including: dashboards, capacity building and classroom observations (as described previously); contributing to the design and implementation of the first instrument to measure schools' managerial capacity; and bringing its expertise on assessment, research and innovation design, implementation, follow-up, interpretation of results, and feedback to policy design (see Annex 6 for details).

#### **B.** Technical

40. The rationale for the SBM intervention proposed in this Project builds on the international evidence that school autonomy is an effective strategy for boosting education outcomes. In particular, decentralizing decision-making authority to parents and communities strengthens accountability by encouraging demand, aligning schools with local priorities and values, and allowing closer monitoring of performance (Bruns, Filmore, and Patrinos 2011). In addition, a growing literature shows the importance of managerial practices on student performance (Bloom et al (2014), Di Liberto, Schivardi and Sulis (2013) and de Hoyos, Garcia and Patrinos (2014)).

### C. Financial Management

41. The Financial Management (FM) risk for this Project is Moderate. From the operational perspective, Component 1 poses some implementation challenges due to the complex implementation arrangements in place and an entangled flow of funds and information that involves a number of actors, including DGDGIE, FNEC, various State Trust Funds (FEEC), and AELs. Other risk factors associated with Component 1 of the proposed Project in terms of FM include: (i) the uncertainty regarding the timing of the transfer of funds from the FEECs to eligible schools, which is largely outside the control of DGDGIE and may delay the overall flow of funds and thus program execution; and (ii) the lack of homogenous administrative capacity across the AELs and recipient schools, which in most cases is low. However, during the two previous Bank projects supporting PEC, these risks have been mitigated through various measures divided in 3 main layers of control:

- <u>Country level mitigating measures</u>. The overall strong country public FM arrangements would be applied to this Project, as it would be integrated into the national budget, which operates under a comprehensive and well established legal framework. The Bank would reimburse eligible expenditures recorded under earmarked budgetary lines and NAFIN would be the Project's financial agent, providing operational support and oversight.
- <u>Program level mitigating factors</u>. There are well defined operating rules governing the program, which include strict eligibility criteria for selecting beneficiaries, clear rules for transferring money, documenting the program's expenditures, and for program oversight.
- <u>Entity level mitigating measures</u>. DGDGIE has a longstanding experience working with the Bank and its FM Unit is well staffed, with an adequate segregation of functions. Moreover, it conducts a number of periodic reconciliatory procedures to reasonably ensure the accuracy of financial information.

42. In addition to the measures described above, the Bank would conduct periodic FM supervisions and the proposed Project would be audited annually by an acceptable audit firm, in accordance with terms of reference acceptable to the Bank.

### **D.** Procurement

43. Given the nature of this Project, most of the procurement actions are to be carried out by schools participating in PEC that receive direct support from the Federal Government according to the program's *Reglas de Operación* (Operating Rules). The procurement actions at this level include small works and actions to improve parents' participation using the Bank's Procurement Guidelines. Each school shall include these actions in an Annual Work Program. Non-consultant services to support capacity building activities and consultant services would also be procured directly by the DGDGIE under Components 2 and 3. Details regarding procurement arrangements are provided in Annex 3.

## E. Social

44. The proposed Project would have a positive social impact, as it would improve managerial capacity and parental participation in public basic education schools and contribute to reducing dropout, failure and repetition rates, which are highly correlated with the most poor and vulnerable in the country. In addition, both programs supported by the proposed Project (PEC and PETC) give priority to schools located in marginalized and indigenous schools. PEC will continue to target all public basic education schools and to prioritize marginalized and indigenous schools; however, given that PETC has been introduced more recently and with a stronger focus on schools situated in rural, marginalized and indigenous communities, it is likely that the share of indigenous and marginalized schools in PEC would stagnate or decrease slightly. Since the proposed Project would focus on supporting the policy of SBM also through PETC, the overall number of indigenous and marginalized schools is expected to increase during the life of the proposed Project. School community members, in particular parents, are key stakeholders for the Project's implementation and have therefore been taken into account in the proposed Project's preparation.

45. The Project triggers OP/BP 4.10 (Indigenous Peoples) since it has a national coverage that includes indigenous schools. An Indigenous People's Plan (IPP) was developed based on previous operations' experiences and the targeting mechanisms defined by PEC and PETC. The IPP has 5 specific objectives and different strategies to guarantee that concrete actions are taken to ensure that indigenous schools benefit from the Project interventions at least at the same rate as the rest of the schools in the country. The preparation of the IPP included a consultation process with school directors, teachers, parents, and students at indigenous schools in 5 states (Estado de México, Morelos, Puebla, Hidalgo and Guerrero). The IPP incorporates their feedback and recommendations accordingly and is in line with the Project's scope. A draft of the IPP, satisfactory to the Bank, was disclosed on June 26, 2014 on the Bank's and SEP's websites. Appropriate grievance-handling procedures and arrangements for monitoring the IPP are in place.

### F. Environmental (including Safeguards)

46. The proposed Project is not expected to have any adverse environmental impacts. Therefore, the Project's environmental rating is C and triggering OP/BP 4.01 (Environmental Assessment) is not required. The direct support to schools is insufficient to undertake the construction of new buildings or major additions to existing structures. Hence, the proposed Project would only support minor civil works at participating schools (minor repairs and maintenance) that would be conducted according to the environmental, health and safety guidelines included in the Operational Rules of PEC, which are mandatory for all participating agencies. All safeguards requirements would be met in full. The implementing agency's capacity for safeguards implementation, including grievance-handling mechanisms and monitoring and evaluation arrangements is adequate.

### **Annex 1: Results Framework and Monitoring**

### **Country: Mexico**

## Project Name: Mexico School Based Management Project (P147185)

### **Results Framework**

### **Project Development Objectives**

#### PDO Statement

The objective of the Project is to improve schools' managerial capacity and parental participation to reduce dropout, repetition and failure rates among PEC Schools and PETC Schools.

**These results are at** Project Level

## **Project Development Objective Indicators**

		Cumulative Target Values			
Indicator Name	Baseline	YR1	YR2	YR3	End Target
1. Proportion of basic education schools in programs to strengthen SBM (PEC and PETC) with a director that has a "sufficient" level of managerial capacity (Percentage)	The baseline will be collected in November 2014.	The target will be set when the baseline is collected.			
2. Proportion of PEC schools with parents' associations participating in the design, monitoring, and adjustment of the school improvement plan (Percentage)	72.70 (2011-12)	73.00	74.00	76.00	78.00
3. Dropout rate among basic education schools in programs to strengthen SBM (PEC, PETC) (Percentage)	Primary 3.83 (2012-13) Secondary 5.44	Primary 3.70 Secondary 5.24	Primary 3.63 Secondary 5.17	Primary 3.55 Secondary 5.11	Primary 3.48 Secondary 5.04

	Baseline	Cumulative Target Values				
Indicator Name		YR1	YR2	YR3	End Target	
	(2012-13)					
4. Gross failure rate among basic education schools in programs to strengthen SBM (PEC, PETC)	Primary 1.30 (2011-12) Secondary	Primary 0.84	Primary 0.59	Primary 0.34	Primary 0.09	
(Percentage)	9.64 (2011-12)	Secondary 9.32	Secondary 9.05	Secondary 8.78	Secondary 8.50	
5. Repetition rate among secondary schools in programs to strengthen SBM (PEC, PETC) (Percentage)	0.87 (2011-12)	0.82	0.77	0.72	0.67	
Intermediate Results Indicators						
			Cumulative T	arget Values		
Indicator Name	Baseline	YR1	YR2	YR3	End Target	
Component 1: Increasing School Autonomy	and Parent Partio	cipation		·	·	
1. General national criteria for the application of the formula to allocate direct transfers to schools adopted by all States (Yes/No)	No	Yes	Yes	Yes	Yes	
Component 2: Improving Schools' Manage	rial Capacity					
2. Design of capacity building activities on SBM for school supervisors (Yes/No)	No	Yes	Yes	Yes	Yes	
3. Percentage of supervisors of PEC and PETC schools that receive capacity building activities in SBM (Percentage)	0.00	40.00	60.00	70.00	80.00	

		Cumulative Target Values				
Indicator Name	Baseline	YR1	YR2	YR3	End Target	
4. Design of capacity building activities on SBM for school directors (Yes/No)	No	Yes	Yes	Yes	Yes	
5. Proportion of school directors that receive capacity building on the use of the SBM dashboard in schools in programs to strengthen SBM (PEC and PETC) (Percentage)	0.00	40.00	60.00	70.00	80.00	
6. Design of capacity building activities on SBM for parents. (Yes/No)	No	Yes	Yes	Yes	Yes	
7. Proportion of PEC and PETC schools that provide capacity building activities to parents on SBM (Percentage)	Baseline will be collected in the next MIR-PEC data- collection trimester.	60.00	80.00	90.00	90.00	
8. Direct project beneficiaries (Number) - (Core)	6,900,000.00	7,500,000.00	7,900,000.00	8,300,000.00	8,900,000.00	
9. Female beneficiaries (Percentage - Sub-Type: Supplemental) - (Core)	48.63	48.70	48.70	48.70	48.70	
Component 3: Research and Innovation						
10. New instrument to measure schools' managerial capacities designed and implemented (Yes/No)	No	Yes	Yes	Yes	Yes	
11. Baseline data collected, analyzed, and presented to education authorities (for the assessment of interventions on PEC and PETC) (Yes/No)	No	No	Yes (September- October 2015)	Yes	Yes	

		Cumulative Target Values			
Indicator Name	Baseline	YR1	YR2	YR3	<b>End Target</b>
12. First follow-up data collected, analyzed, and presented to the education authorities for policy adaptation/re-design (for the assessment of interventions on PEC and PETC)(Yes/No)	No	No	Yes (June 2016)	Yes	Yes
13. Second follow-up data collected, analyzed, and presented to the education authorities for policy adaptation/redesign (for the assessment of interventions on PEC and PETC)(Yes/No)	No	No	No	Yes (June 2017)	Yes

# **Indicator Description**

Indicator Name	Description	Frequency	Data Source / Methodology	Responsibility for Data Collection
Proportion of basic education schools in programs to strengthen SBM (PEC and PETC) with a director that has a "sufficient" level of managerial capacity	Three different surveys that intend to measure the managerial capacity of school directors ("The World Management Survey," developed by the London School of Economics, "Principal Instructional Management Rating Scale," developed by a consulting firm and PEC's own directors' questionnaire) will be piloted in a representative sample at a national level in November 2013. The survey that proves to be the most suitable for the Mexican context will be selected and adapted to be used in an annual basis. The results of the survey will be reported on a scale where 'sufficient' level of managerial capacity will be clearly defined as one of the scale levels.	Annual	Newly developed instrument to measure managerial capacity in public schools in Mexico. The instrument will be applied to a randomly selected representative sample of PEC and PETC schools at the national level.	Firm hired to apply the survey and collect the data. <i>The Dirección General de</i> <i>Gestión e Innovación</i> (DGDGIE) at the <i>Subsecretaría deEducación</i> <i>Básica</i> (SEB) will be in charge of following up with the firm and ensuring that it complies with its TORs.
Proportion of PEC schools with parents' associations participating in the design, monitoring, and adjustment of the school improvement plan	The targets were set based on the historical trend from PEC (Phase II) survey for school stakeholders (school directors, teachers, parents and students) conducted under PEC II and adjusted for the potential impact from the interventions.	Annual	The instrument to collect this information will continue to be the instrument developed to measure this indicator under the second Phase of the School Based Management Project (P115347).	Firm hired to apply the survey and collect the data. DGDGIE at SEB will be in charge of following up with the firm and ensuring that it complies with its TORs.
Dropout rate among basic education schools participating in programs to	Defined as the total number of PEC and PETC primary and secondary students that drop out of school before they conclude an	Annual	<i>Estadística 911</i> and PEC, PETC data bases.	DGDGIE at SEB

# **Project Development Objective Indicators**

Indicator Name	Description	Frequency	Data Source / Methodology	Responsibility for Data Collection
strengthen SBM (PEC, PETC)	education year as a percentage of the total number of students enrolled in the school year. The targets were set based on the trend observed between 2008 and 2013 and adjusted for the potential impact from the Project's interventions.			
Gross failure rate among basic education schools participating in programs to strengthen SBM (PEC, PETC)	Defined as the proportion of total students that failed at least one subject. The targets were set based on the trend observed between 2008 and 2013 and adjusted for the potential impact from the Project's interventions.	Annual	<i>Estadística 911</i> and PEC, PETC data bases.	DGDGIE at SEB
Repetition rate among secondary schools in programs to strengthen SBM (PEC, PETC)	Defined as the proportion of total students that failed 6 or more subjects. The targets were set based on the historical trend and adjusted for the potential impact from the Project's interventions.	Annual	<i>Estadística 911</i> and PEC, PETC data bases.	DGDGIE at SEB
Intermediate Results Ind	licators			
Component 1: Increasing	g School Autonomy and Parent Partici	pation		
General national criteria for the application of the formula to allocate direct transfers to schools adopted by all States	The general national criteria for the formula will ensure that resources are allocated transparently and that the incentives of different stakeholders are aligned to improve the quality of education.	Annual	SEB Acuerdo Secretarial. Official Agreement between SEB and each of the States. Each state to sign an official document with SEP regarding the adoption of the general national criteria for the application of the formula.	DGDGIE at SEB

Indicator Name	Description	Frequency	Data Source / Methodology	Responsibility for Data Collection			
Component 2: Improving Schools' Managerial Capacity							
Design of the capacity building activities on SBM for school supervisors	Concrete interventions to build capacity for school supervisors will be designed based on international and national best practices. This will include basic capacity building activities in the SBM dashboard for supervisors, as well as more specialized capacity building activities (diplomas) for school supervisors. This indicator do not focuses only on supervisors of PEC and PETC schools since schools supervisors are responsible for school zones that include all types of schools independently of their participation in PEC, PETC or other programs.	Once	Curriculum for the capacity building of school supervisors on SBM.	Consultant to support the DGDGIE at SEB			
Percentage of supervisors of PEC and PETC schools that receive capacity building activities in SBM	All school supervisors will receive at least basic capacity building on the use of the electronic portfolio (dashboard) to support school supervision, which will include, among others, capacity building to use a Method of Standardized Classroom Observation. The targets were set based on SEB goals for 2018.	Annual	National database of school supervisors. State databases of school supervisors.	DGDGIE at SEB			
Design of the capacity building activities on SBM for school directors	Concrete interventions to build capacity in school directors on SBM, including the engagement of teachers and parents on the school management, among others, would be designed based on international and national best practices.	Once	Curriculum for the capacity building of school directors on SBM.	Consultant to support the DGDGIE at SEB			

Indicator Name	Description	Frequency	Data Source / Methodology	Responsibility for Data Collection
Proportion of school directors that have received capacity building on the use of the SBM dashboard in schools participating in programs to strengthen SBM (PEC and PETC)	All school directors will receive at least basic capacity building on the use of the electronic portfolio (dashboard) to support SBM, which will include, among others, capacity building to use a Method of Standardized Classroom Observation. The targets were set based on SEB goals for 2018.	Annual	PEC and PETC databases.	DGDGIE at SEB
Design of the capacity building activities on SBM for parents.	Concrete interventions to build capacity in parents on SBM and social participation at the school level would be designed based on international and national best practices.	Once	Curriculum for the capacity building of school directors on SBM.	Consultant to support the DGDGIE at SEB.
Proportion of PEC and PETC schools that provide capacity building activities to parents on SBM	The targets were set based on SEB goals for 2018.	Trimestral	Matriz de Indicadores de Resultados PEC (information would be collected at the state level and reported to the federal government).PEC and PETC databases.	DGDGIE at SEB
Direct project beneficiaries	In this case primary beneficiaries would be students in preschool, primary, and lower secondary in schools participating in programs to strengthen school based management. This indicator is calculated as a percentage.	Annual	PEC, PETC databases.	DGDGIE at SEB
Female beneficiaries	Based on the assessment and definition of direct project beneficiaries, this indicates the percentage of beneficiaries that are female. This indicator is calculated as a percentage.	Annual	PEC, PETC databases.	DGDGIE at SEB

Indicator Name	Description	Frequency	Data Source / Methodology	Responsibility for Data Collection
Component 3: Research an	d Innovation			
New instrument to measure schools' managerial capacities designed and implemented	As previously described, there are three instruments that already exist and will be piloted to see which proves to be the most suitable for the Mexican context.	Annual	DGDGIE archives.	DGDGIE at SEB
Baseline data collected, analyzed, and presented to education authorities	The baseline is expected to be collected at the beginning of the 2014-15 school year.	Once	Firm's data and consultant's report.	Firm hired to undertake this activity and DGDGIE at SEB to ensure that the firm complies with their TORs.
First follow-up data collected, analyzed, and presented to the education authorities for policy adaptation/re-design	The first round of data is expected to be collected at the end of the 2014-15 school year.	Once	Firm's data and consultant's report.	Firm hired to undertake this activity and DGDGIE at SEB to ensure that the firm complies with their TORs
Second follow-up data collected, analyzed, and presented to the education authorities for policy adaptation/redesign	The first round of data is expected to be collected at the end of the 2015-16 school year.	Once	Firm's data and consultant's report.	Firm hired to undertake this activity and DGDGIE at SEB to ensure that the firm complies with their TORs.

#### **Annex 2: Detailed Project Description**

1. PEC started in 2001 and has operated continuously to date, with the participation of the federal and the state governments through their respective education authorities, as a strategy to help urban schools located in low income areas improve their operating conditions, giving priority to schools located in poor neighborhoods. These schools generally have deficient infrastructure and facilities, poor student learning outcomes and low participation by the school community. As the Program evolved, it expanded to include schools in low income rural areas.

2. PEC is an educational strategy that gives autonomy to schools by encouraging shared decisions on school improvements by school directors, teachers, and parents. PEC aims to increase the quality of public education through strengthening school autonomy, ultimately contributing to: (i) reducing urban poverty and lessening educational inequality by improving the academic achievement of students enrolled in preschool, primary and lower secondary public schools in Mexico; (ii) strengthening schools' managerial capacities and integrating local management strategies; and (iii) building social capital and increasing cooperation between schools and local communities.

3. The policy of strengthening school based management is currently implemented through national programs, among others, PEC and PETC. In 2007-08, SEP introduced PETC in basic education to increase the number of school-day hours and promote school based management following the PEC scheme. The school based management component of PETC is exactly the same as PEC and follows the guidelines for school based management, but the model also includes extra instruction time, free meals (in schools in highly marginalized areas), and additional learning materials. The two programs share the goal of contributing to students' learning within a framework of increased school autonomy, the use of evaluations to improve pedagogical strategies, better managerial capacities at the school level, and active social participation.

4. The programs to strengthen school based management are based on the premise that when a school has more autonomy and greater participation by the school community, it is better able to identify aspects that need improvement, take measures towards solving problems, and account for results. Social participation in schools – particularly parental participation – raises teacher accountability and increases the flow of resources from the school community. The Programs' strategy assumes that improvements to the internal organization and decision-making capacity of the schools are key elements for achieving higher quality of education. Starting with this basic concept, PEC and PETC promote a model of school autonomy and SBM that emphasizes: (i) liberty to make school decisions; (ii) shared leadership; (iii) teamwork; (iv) flexible teaching practices; (v) collaborative planning; (vi) evaluation to inform continuous improvement; (vii) responsible social participation; and (viii) accountability.

5. PEC is financed jointly by federal and state funds, through SEP and the local education authorities, presently at a ratio of three-to-one federal to state contributions. The direct support to schools is an incentive to promote the desired SBM transformation and, as such, is an innovative tool not only to transfer funds directly to schools, but primarily to empower the school community. The direct support to schools is also an instrument to introduce a culture of

accountability, as each participating school must keep precise records of the use of funds and account for the use of any additional resources contributed by local community.

6. Since the great majority of schools have no experience in strategic planning or in participatory management, PEC and PETC provide technical assistance and capacity building to help interested schools in the preparation of school improvement plans. This assistance is provided by local education authorities through different means: (i) direct assistance to the school by the technical coordination of the Program at the local level; (ii) technical meetings organized by the supervisory team of each level of education (preschool, primary and lower-secondary); or (iii) services provided to schools by pedagogic assistants assigned to the corresponding supervisory teams. In all cases, technical assistance focuses on school management and planning, diagnosis of school needs, and evaluation of results. Technical assistance is primarily provided to school directors who, in turn, have the responsibility of sharing the information with teachers and parents. In the case of PETC, technical assistance is provided to all schools selected by Federal School Authorities to participate in the Program.

7. At the local level, PEC is carried out by the AELs. The AELs complete a process of dissemination, technical assistance to schools for preparation of school improvement plans, qualification of proposals, and selection of schools to participate in PEC. The AELs transfer the direct support from the state trust fund to the bank accounts of PEC's participating schools. To qualify for the Program, schools must establish participatory school management and present a satisfactory school improvement plan. An initial direct support is awarded to all schools selected to participate in PEC in a given year, which may be renewed for a maximum of five years. Each year, the schools that wish to continue in the Program must re-apply, meet the selection criteria, and be chosen by the state selection committee to be part of the program. Although schools can receive PEC's direct support for a maximum of five years, they can get technical assistance for a longer period, given that they comply with the Programs' operating rules.

# **Project Components**

8. The Mexican Secretariat of Public Education (SEP) currently implements the constitutional mandate of strengthening school based management through two programs: PEC and PETC. Starting in academic year 2014-15, the amounts of direct support to schools and the co-responsibilities attached to them, defined in the operating rules or guidelines of PEC and PETC, will be the same under both programs. In addition, the national strategy to strengthen school based management through an improvement of schools' managerial capacity (as defined by the Government's guidelines on school based management) is applicable to schools participating in any of the two programs. The proposed Project would be comprised of the following three components to support the strengthening of school based management through PEC and PETC: i) provision of direct support to PEC schools to implement improvement plans; ii) provision of technical assistance to PEC schools and PETC schools to strengthen schools based management; and iii) research and innovation.

#### **Component 1: Increasing School Autonomy and Parent Participation (US\$342.000 million)**

9. This Component would provide direct support to PEC schools to implement improvement plans. The school improvement plans (*Ruta de Mejora*) need to be discussed and

agreed with parent associations. At the request of the GoM, this Component would only include PEC schools. PEC schools receive direct support through Federal and State-Trust Funds that have been proven to be effective.

- a. <u>Eligibility criteria</u>. Under PEC, the Federal Education Authority (AEF) allocates to each State a total budget to cover the direct support to schools based on the number of students in the State and the average level of marginalization of schools. The Local Education Authority (*Autoridad Educativa Local*, AEL) issues a call for applications to enroll in PEC. Having a school improvement plan (*ruta de mejora*) is mandatory to participate in PEC. Priority is given to schools serving marginalized and vulnerable populations<sup>11</sup> and those with low achievement levels in the national standardized test and high dropout rates.
- b. <u>School improvement plan.</u> This is a strategic plan whereby the school's technical council (*Consejo Técnico Escolar*, CTE) identifies the school's main challenges, goals, and means to reach them. The plans cover improvements to school management, teaching practices, and social participation to improve student learning. The plan is presented to and agreed on with the school's social participation council (*Consejo Escolar de Participación Social*, CTPS), which includes parents Approval of the plan is by the CTPS and AEL is mandatory to be eligible for PEC's support.
- c. <u>Direct support to schools</u>. The amounts are defined by a resource allocation formula using two criteria: exogenous conditions and performance in quality indicators. The formula assigns an initial amount based on the locality's (or community's) level of marginalization where the school is located (defined by CONAPO) and the total number of students. After the first year, participating schools are eligible for additional support based on the schools' average year-to-year variation in the national standardized test and their retention rate. Direct support to schools average around US\$4,000 per year and, while small compared with the total costs of running schools, are not insignificant when compared to the budget managed directly by school directors.
- d. <u>The use of direct support to schools.</u> These resources are used to support activities related to the school improvement plans, as opposed to recurrent costs of the school's everyday functioning. Schools can use the direct support as long as they contribute to the objectives of the improvement plan, are approved by the CTPS, and include, among others, educational materials, activities to improve social participation, and/or infrastructure maintenance.

10. In addition to improving transparency and accountability, the formula defining the size of the direct support to each school would be used to align the incentives of all agents in the education system while keeping schools at the center of the strategy. This would be achieved by defining additional resources allocated to Local Education Authorities (States) and supervisors as a proportion of the sum of the direct support received by schools under their respective

<sup>&</sup>lt;sup>11</sup> Located in zones where the National Program for Social Prevention of Violence and Crime and the National Crusade Against Hunger operate, as well as schools operating in marginalized areas and serving indigenous populations.

jurisdictions. For instance, a school supervisor responsible for a certain number of schools could get additional resources equal to a small percentage of the sum of the direct support received by these schools. This supervisor could then use these additional resources to improve the technical assistance provided to his or her schools. Under a very simple resource allocation formula, the supervisor would get more resources if his or her schools are marginalized and/or have a large number of students. Additionally, given initial conditions, the supervisor would have incentives to provide relevant technical assistance to schools under his or her responsibility, since improvements in quality indicators (retention or learning outcomes) would signify more resources to the supervisor. The same logic applies to AELs.

# Component 2: Improving Schools' Managerial Capacity (US\$3.500 million)

11. Component 2 would provide technical assistance to PEC schools and PETC schools to strengthen school-based management. This Component aims to improve schools' managerial capacity or the school's ability to use existing resources in an effective way to provide better education services.

12. Under the education reform, school supervisors' and directors' roles are defined by standards set by the Federal and Local Education Authorities. Supervisors are responsible for providing schools with the needed tools, technical assistance, and advice to improve management practices and, ultimately, the quality of education services. School directors' responsibilities include organizing the CTE to identify school challenges, discuss options for improvement, define measurable and attainable goals, monitor the performance on key indicators, and promote social participation, among others.

13. The supervisors' and school directors' diagnosis and performance monitoring activities would be based on a newly developed school dashboard providing them with all the necessary information to undertake these activities. SEP will develop and implement a capacity building program for school supervisors and directors on the use of the dashboard, the use of a classroom observation method, and the improvement of schools' managerial practices in general. Existing evidence for Mexico based on previous versions of PEC suggests that schools' managerial capacity can indeed be improved via higher capacity of school directors. Additionally, recent international evidence has identified school supervision as a potential cost effective way to improve schools managerial capacity and rigorous impact evaluations to test their impact are under way (see Fryer (2014) for the US).

14. Within its interventions to improve schools' managerial capacity, the proposed Project would not include an intervention explicitly designed for teachers. This does not, however, minimize the role of teachers in the strategy to promote school autonomy; rather, teacher training is a core responsibility of the newly created unit for the coordination of the SPD (*Coordinación Nacional del Servicio Profesional Docente*, CNSPD). The criteria for training teachers are based on their evaluation, which is, in turn, a responsibility of the INEE. Therefore, the activities supported by Component 2 would require substantial coordination between the SEB, the CNSPD, and INEE.

# Subcomponent 2.1: School Dashboards for Supervisors and School Directors

15. This subcomponent would support the development of a school dashboard for schools' supervisors and directors including, *inter alia*, performance indicators and best practices.

16. The AEF, in close collaboration with AELs, will develop a dashboard with information generated by the national education management information system (SIGED) and other sources of information. The dashboard will include the following sections: (i) minimum standards; (ii) basic inputs; (iii) school performance indicators; (iv) schools' incidents; (v) management practices; (vi) goals; and (vii) sharing best practices.

17. The dashboard would monitor the minimum standards ("*normalidad mínima*") of schools including:

- a. Number of school days, as defined by the official school calendar;
- b. All students should have a teacher for all school days;
- c. All teachers should start their class on time;
- d. All students should attend school during school day and attend classes on time;
- e. All learning material should reach all schools;
- f. Most of the time in school should be used for instruction; and
- g. The teachers should be able to keep students engaged in the learning process for most of the instruction time.

18. The dashboard will also include information on schools' basic inputs, such as the number of classrooms, students per classroom, number of teachers, desks available, functioning toilets, water fountains, and availability of learning materials, among others. A section of the dashboard will contain performance indicators such as failure and repetition rates, dropouts or retention, and learning outcomes in Mathematics and Spanish based on the national standardized test. The dashboard will include a registry of school incidents or reports such as infrastructure maintenance or repair needed, administrative issues and other exogenous conditions like floods and strike violence, among others.

19. One of the most important elements of the dashboard will be a section recording the school directors' management practices, such as the use of evaluation results as inputs to the school improvement plan, the number of meetings between the director and teachers to discuss pedagogical strategies to address the schools' main challenges, and the strategies carried out by the director to engage parents and the community at large in the learning process, to name a few.

# Subcomponent 2.2: Capacity Building Strategy for Schools

20. A capacity building strategy for school directors, supervisors and parents<sup>12</sup> would complement the design and implementation of the school dashboards. Among the activities to be supported would be the development and implementation of a capacity building strategy for

<sup>&</sup>lt;sup>12</sup> The design and rollout of the capacity building strategy for parents would be part of the activities supported under this subcomponent.

school directors and supervisors. This would include the design of capacity building programs to ensure that all directors and supervisors in PEC and PETC schools know how to use the dashboard. Perhaps more importantly, the capacity building strategy would be geared to how such a tool can be used to improve school management practices. Design of the capacity building program and its rollout to prioritize among those most in need and implementation would also be supported by this component.

21. To measure and monitor the fulfillment of keeping students engaged in the learning process (part of the "*normalidad mínima*"), this subcomponent would support the capacity building of school directors and supervisors to use a classroom observation method.

22. This subcomponent would also support the improvement of schools' managerial practices through the development and implementation of capacity building activities for parents.

23. The proposed Project would support the development of the dashboard, but perhaps more importantly, the proposed Project would support the development of the information system needed to keep the schools' dashboards running, relevant, and up to date. Based on best international practice, the proposed Project would assist the GoM in adapting the SIGED, the school administrative data "*Formato* 911," the information generated by the classroom observation method, and the results from the standardized test to achieve consistency with the dashboard's objectives. Technical assistance to the GoM for the effective implementation of Component 2 would include the preparation of guidelines describing an implementation and maintenance protocol for said dashboards. The development and implementation of the dashboard and the relevant capacity building activities would be complemented with "usability" tests to understand the relevance of the tool and identify areas of improvement.

# **Component 3: Research and Innovation (US\$3.625 million)**

24. This Component would: (i) provide support for the development of a new instrument to measure PEC Schools' and PETC Schools' managerial capacity through the piloting, redesign (if necessary), implementation, and comparison of alternative questionnaires to measure said managerial capacity; (ii) provide support to States to improve adherence to PEC's Operational Rules through the carrying out of workshops and knowledge exchange activities; and (iii) provide support for the carrying out of an assessment in at least two self-selected States, which will estimate and quantify the effect of the intervention supported by the proposed Project through PEC and PETC.

# Subcomponent 3.1: Measuring Schools' Managerial Capacity

25. Recent evidence using data for Mexico and elsewhere shows the importance of managerial practices on students' performance (Di Liberto, Schivardi and Sulis (2013), Bloom et. al (2014) and de Hoyos, Garcia and Patrinos (2014)). A starting point for improving managerial capacity at the school level is to measure it. This proposed Project would, therefore, support the piloting, redesign (if necessary), implementation, and comparison of three measurement instruments: "The World Management Survey," developed by the London School of Economicsl; "Principal Instructional Management Rating Scale," developed by a consulting

firm and PEC's own directors' questionnaire. The preferred instrument would identify the most important deficits in schools' managerial capacity vis-à-vis a set of standards defined by SEP. The capacity building activities under Component 2 would be informed by the results of the first measurement and would focus on strengthening skills that are highly correlated with learning outcomes in the context of school autonomy.

# Subcomponent 3.2: Technical Assistance to States to Improve Adherence to PEC's Operating Rules

26. The activities carried out under the umbrella of technical assistance to the States would include supervision visits, national and regional meetings, workshops, and knowledge exchanges on best practices intended to support States implementing units' understandings of the operating, financial and implementation rules of the Program.

#### Subcomponent 3.3: Assessment, Research and Innovation

27. An assessment, using randomized control trials, would be implemented in self-selected States to estimate and quantify the effect of the Project-supported interventions. Outcome variables would include intermediate indicators directly linked with the intervention, such as schools' managerial practices (measured by the newly developed instrument) and, long term indicators measuring the quality of education services: efficiency rates, dropouts, repetition, failure, and learning outcomes given differences in PEC and PETC target populations, two independent evaluations in two different States would be conducted for each of the two programs. In each of these evaluations, three groups would be formed by randomly selected schools: schools part of PEC (or PETC) not receiving the package of interventions to improve schools' managerial capacity (supported under Component 2), PEC (or PETC) schools receiving the package of interventions to improve school's managerial capacities, and a control group. As permitted by time constraints and willingness of States, the two evaluation designs would define a third treatment group receiving only the package of interventions supported under Component 2, without the direct support to test if this would be enough to improve managerial capacities, parents' participation, and the quality of education services.

#### **Annex 3: Implementation Arrangements**

#### **Project Administration Mechanisms**

1. The implementing agency of the proposed Project would be the SEP through the DGDGIE, which manages both the PEC and PETC programs, as part of the wider policy of school based autonomy. Although the DGDGIE has implemented other Bank projects and has proven capacity and experience, some of its operational constraints need to be addressed. Specifically, component 1 of the proposed Project poses some complexity in the dispersion and verification of transfers at the school level, in the different layers of management and supervision that are required to guarantee transparent execution at this level, and in the heterogeneity of Local Education Authorities' capacities and operation. The Bank team is working closely with the DGDGIE to simplify administrative processes at the school level, while still providing the necessary tools and managerial support to schools to ensure that the transfers are executed according to PEC's Rules of Operation. Additionally, the DGDGIE is providing tailored support to AELs to fulfill more responsibilities at the state and school levels.

#### 2. The DGDGIE's main responsibilities for the Project's implementation are:

- a. Define and interpret the Program's Operating Rules;
- b. Monitor Program objectives, goals, processes, and timetables, in coordination with the state education authorities;
- c. Administer federal Program funds through the National Trust Fund (FNEC) and supervise the allocation of Program funds to the states;
- d. Support the carrying out of the Programs by the states and ensure that states comply with the Program Operating Rules;
- e. Train state technical staff involved in the Programs;
- f. Advise states on strategies for Program dissemination;
- g. Monitor the school based management processes carried out by the states and the participating schools;
- h. Operate and develop appropriate information systems and utilize the information system to monitor Program operations at state and school levels;
- i. Design and carry out national Program dissemination campaigns to create awareness among schools and the general public about the importance of supporting school based management;
- j. Communicate with and liaise with local authorities, other government offices, and other key actors about program needs and issues;
- k. Carry out external and internal Program evaluations with the support of SEP's General Directorate of Evaluation (*Dirección General de Evaluación*, DGE) and the INEE, among others; and
- 1. Support the national operating costs of the Programs according to the budget percentages limits established in the Program Operating Rules (2 percent for PETC and 4 percent for PEC).

# 3. The AEL's main responsibilities for the Project's implementation are:

- a. Develop the necessary administrative structure to plan, disseminate, operate, monitor and evaluate the Program.
- b. Provide technical assistance to interested schools to help them implement a process of internal evaluation to identify weaknesses, organize discussion among the teachers and the school director, design interventions to address the school's problems and monitor progress.
- c. Ensure that the resources of the Program reach the most vulnerable schools.
- d. Create a unique database with the schools participating in the Program and share this information with DGDGIE.
- e. Ensure that participating schools have in place a mechanism to use direct support in a transparent way and only in activities included in the school improvement plan.
- f. Ensure that participating schools share and discuss the contents of the school improvement plan and the end of school year report with the CTE, CTPS and AEL.

# 4. The School's main responsibilities for the Project's implementation are:

- a. Implement a continuous process of internal evaluation to identify weaknesses, organize discussion among the teachers and the school director, and design interventions to address the school's problems and monitor progress. All these should be part of the school improvement plan which should include short, medium, and/or long-term goals, depending on the school's needs.
- b. Coordinate all other Federal or State programs or initiatives through the school improvement plan to achieve synergies and avoid duplicating efforts.
- c. Use the direct support in accordance to PEC's operating rules, following transparency criteria and financing only those activities included in the school improvement plan.
- d. Develop and share with the CTE, CTPS and AEL the end of school year report, clearly identifying the use of direct support and progress towards reaching the goals established in the school improvement plan.
- e. Work collaboratively with the school community (through the CTPS) to develop school improvement plans.
- f. Collect and provide data for use in the dashboards and monitoring and evaluation

# **Financial Management Arrangements**

5. As noted earlier, from the operational perspective Component 1 poses considerable implementation challenges due to a complex flow of funds and information which operates as follows:

• Flow of funds: The Program's funds are first allocated as part of SEP's budget, which is approved annually by Congress. Every school cycle, the Program's funds are transferred to a National Trust Fund<sup>13</sup> (FNEC, by its acronym in Spanish) and from there into a

<sup>&</sup>lt;sup>13</sup> *Fideicomiso Nacional de Escuelas de Calidad* – FNEC, which is administered by a commercial bank.

number of State Trust Funds (FEEC, by its acronym in Spanish)<sup>14</sup> created for the operation of the program. The States participating in the program shall deposit first their contribution into the FEEC in order to receive the Federal Government's contribution, in accordance to the PEC's operating rules. The funds are transferred to eligible schools from the FEECs, as per the instructions of the Local Education Authority (AEL).

• Flow of information: PEC schools report the expenses incurred under the Program to the AELs, which in turn present quarterly financial reports to the DGDGIE central offices, which has a central FM unit in charge of consolidating the financial information after conducting a number of checks and balances procedures.

6. The FM risk that arises from this complex process is mitigated through various measures, as described in the Appraisal Summary's FM Section, which mainly include the country's overall strong public FM arrangements, the fact that the Program is governed by a set of well-defined operating rules that include strict eligibility criteria for selecting beneficiaries, clear rules for transferring money, documenting the program's expenditures, and for program oversight. In addition, DGDGIE has longstanding experience working with the Bank and its FM Unit is well staffed with an adequate segregation of functions. In addition, the Bank would conduct periodic FM supervisions and the Project would be audited annually by an acceptable audit firm, in accordance with terms of reference acceptable to the Bank.

7. **Loan Financial administration**. NAFIN would act as the financial agent of the Borrower for the Loan. In that capacity, NAFIN would manage loan disbursement processes and provide other implementation support and oversight, based on its many years of experience with Bank-supported projects.

8. **Financial reporting**. DGDGIE would use the COI (*Sistema de Contabilidad Integral*) system for preparing the Project's accounting records, which is a commercial software with adequate capabilities to recognize different levels of accounts and issue financial reports. DGDGIE would prepare bi-annual interim financial unaudited reports and annual financial statements which would be audited by an independent audit firm selected by the *Secretaría de la Función Pública* (SFP) and acceptable to the Bank. The terms of reference for the financial audit would require the external auditors to provide an opinion on the use by eligible schools of loan proceeds and actual expenditures for goods, works and services as applicable.

9. **Internal control and internal auditing**. In addition to the country's budget regulations and procedures, PEC and PETC are subject to the Program's operational rules and to the Federal Public Administration Internal Control Standards issued by the SFP, which as a whole provide for sound internal control arrangements for the Programs. In addition to various financial controls, the Programs' operational rules include measures aimed at involving parent associations in the control of funds, such as the following:

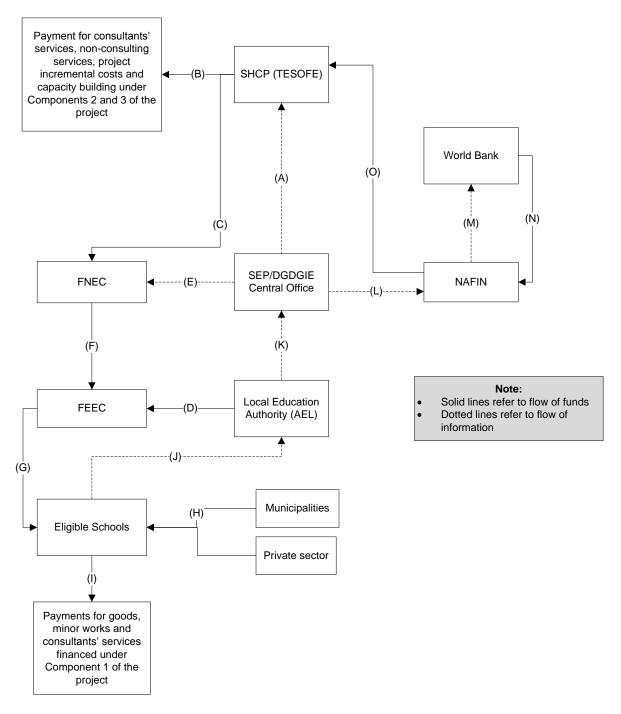
<sup>&</sup>lt;sup>14</sup> *Fideicomisos Estatales de Escuelas de Calidad* – FEEC, also administered by commercial banks.

- The school parents' associations are involved at various levels of Program operation, such as planning the use of resources and the authorization of payments related to school direct support.
- At the end of each school cycle, each beneficiary school must prepare and submit reports detailing the use of direct support. These schools are responsible for keeping the files with the expenditures' supporting documentation.
- The AELs are responsible for: (i) ensuring that beneficiary schools have adequate mechanisms to manage direct support. Among other measures, all checks must be signed by the school's director and by a representative of the Parents' Association; and (ii) overseeing the adequate integration of the expenditure files.

10. The internal auditing function is carried out by SEP's Internal Control Unit (OIC), which reports to SFP and must follow the Public Audit Standards and Guidelines issued by SFP. The latter also approves the OIC's annual work programs, oversees its operation, and receives its audit reports. Good systems are in place for timely follow-up to internal audit observations and implementation of recommendations.

11. **Flow of funds**. Based on the budget approved annually by the Congress, the Ministry of Finance will allocate funds to SEP/DGDGIE. These funds will be available in the Federal Treasury (TESOFE, by its acronym in Spanish) and will be paid to beneficiaries upon SEP/DGDGIE's request through the Single Treasury Account (STA)<sup>15</sup> system managed by TESOFE. The flow of funds process is explained blow:

<sup>&</sup>lt;sup>15</sup> The STA is a unified structure of government bank accounts that gives a consolidated view of government cash resources. The STA is managed by the TESOFE, a unit of the Ministry of Finance and Public Credit (SHCP). The overall objective of the STA is to achieve operational efficiency in the administration of the Federal Government's funds through a centralized cash management system.



- A. SEP/DGDGIE will instruct the TESOFE to transfer funds by issuing payment instructions (*Cuentas por Liquidar Certificadas* CLCs) under the STA.
- B. For payments under Components 2 and 3 of the Project, based on the CLCs issued by SEP/DGDGIE, the TESOFE will make direct payments for consultants' services, non-consulting services, project incremental costs and capacity building.
- C. For payments under Component 1 of the Project (Direct Support to PEC Schools), based on the CLCs issued by SEP/DGDGIE, the TESOFE will transfer the funds to the FNEC.
- D. The AEL will transfer their corresponding contribution (in accordance with the Program's operational rules) to the FEEC.

- E. After being notified that the FEEC has received the State contribution, the DGDGIE will instruct the FNEC to transfer the Federal Government contribution to the FEEC, which equals three times the State contribution in accordance with the Program's operational rules.
- F. FNEC will transfer funds to the FEECs as per instructions received from DGDGIE.
- G. Once the FEEC has received the State and the Federal contributions, after receiving instructions from the AEL, the FEECs will transfer the resources to the schools participating in the PEC Program.
- H. The schools may also receive contributions from Municipal Governments and Private Sector Entities; however, these funds will not be part of this Project, as the Government will not require reimbursement for these funds.
- I. The eligible schools will make payments for goods, minor works and consultants' services as approved in the PEC's operational rules.
- J. The schools will present periodic financial reports to the AELs as established in the PEC's operational rules.
- K. The AEL will present quarterly financial reports to the PEC Central Offices reflecting the expenditures incurred by schools during a quarterly period.
- L. The FM Project Unit within DGDGIE's Central Office will review and reconcile the information, determine the amount of eligible expenditures, and prepare the financial and disbursement information required by the Bank, which it will send to NAFIN.
- M. NAFIN will review and submit the SOEs to the Bank through the client connection system.
- N. The Bank will reimburse the eligible expenditures into the Project account designated by NAFIN.
- O. NAFIN will reimburse the program funds to TESOFE.

12. **Disbursement arrangements**. The loan disbursement arrangements<sup>16</sup> are hereby summarized:

Disbursement method	Reimbursement of eligible expenditures (financed through the Government budget) into a Project account in US\$ designated by NAFIN.
Supporting documentation	IFRs <sup>17</sup>
Retroactive expenditures	The proposed Project would finance retroactive eligible expenditures up to an aggregate amount not to exceed \$70,000,000 for payments made prior to the date of signature of the Loan Agreement, but on or after May 1, 2014. These expenditures would be subject to the regular project external audit.
Recognition of eligible	For component 1 of the Project, the Bank would recognize the expenditures once funds are deposited into eligible schools' bank accounts. Direct

<sup>&</sup>lt;sup>16</sup> For details, please see the Disbursement Handbook for World Bank Clients.

<sup>&</sup>lt;sup>17</sup> All expenditure supporting documentation will be available for review by the external auditors and Bank staff at all times during Project implementation, until at least the later of: (i) one year after the Bank has received the audited Financial Statements covering the period during which the last withdrawal from the Loan Account was made; and (ii) two years after the Closing Date. The Borrower and the Project Implementing Entity shall enable the Bank's representatives to examine such records.

Expenditures	support to schools shall not exceed the equivalent of US\$9,000 per year. Each year, the Bank would review the program's operational rules in order to determine their acceptability. If as a result of future changes to the operational rules the amount of school direct support exceeds the threshold of US\$9,000, the Bank may establish additional control measures for the use of funds and recognition of expenditures.
	As explained in the previous section of this document, PEC schools report the expenses incurred under the Program to the AEL, which in turn present quarterly financial reports reflecting the financial program execution to the DGDGIE central offices, which has a central FM unit in charge of consolidating the financial information after conducting a number of checks and balances procedures.
	If any ineligible expenditures are detected as a result of these reconciliatory procedures, an external or internal audit, and/or a Bank supervision, in accordance to the Bank's disbursement policies the Bank may require the Borrower to (a) refund the amount of ineligible expenditures to the Bank or to the designated account (if applicable); or (b) in exceptional circumstances, provide substitute documentation.
	Expenditures under Components 2 and 3 would be recognized after the payment has been made and has been properly documented.

# **Procurement Arrangements**

# A. General

13. Procurement for the proposed Project would be carried out in accordance with the World Bank's "Guidelines: Procurement of Goods, Works and Non-Consulting Services under IBRD Loans and IDA Credits & Grants, January 2011 (revised July 2014) and Selection and Employment of Consultants under IBRD Loans & IDA Credits & Grants by World Bank Borrowers, January 2011 (revised July 2014)." Contracts to be supported by the Project, the different procurement methods or consultant selection methods, the need for prequalification, estimated costs, prior review requirements, and timeframe are agreed between the Borrower and the Bank in the Procurement Plan. The Procurement Plan would be updated at least annually or as required to reflect the actual Project implementation needs and improvements in institutional capacity.

14. As in previous phases, and given the nature of this Program, most of the procurement actions are made by PEC beneficiary schools with the supervision of the AEL. The procurement actions at this level include small works, goods and capacity building activities. Each PEC school shall include these actions in an Annual Work Program. The methods to be used for the procurement of goods and services under the Loan would be described in detail in the OM and agreed in the Procurement Plan.

15. **Procurement of Works**: Small works would be procured by schools under Category 1 "Goods, minor works and consultants' services financed under the relevant Direct Support." These works would include construction and improvement of learning and sanitary facilities, minor repairs, and maintenance works. These works would be generally procured through shopping or price quotations from local contractors.

16. **Procurement of Goods and Non-Consulting Services**: Sundry goods and small value items, including didactic materials and furniture, would be procured by PEC schools under Component 1. These items would be generally procured through shopping or price quotations from local suppliers.

17. Non-consulting services would also include costs associated with capacity building activities, logistics, organization of seminars, workshops, printing, materials reproduction, publication, and dissemination related activities as included in the Procurement Plan.

18. **Consultant Services**: It is expected that under Component 2, the proposed Project would support the necessary technical assistance to improve schools' managerial capacity or the schools' ability to use existing resources in an effective way to provide better education services.

19. The short list of consultants, estimated to cost less than US\$1,000,000 equivalent per contract, may comprise entirely national consultants, in accordance with the provisions of paragraph 2.7 of the Consultant Guidelines and as agreed in the Procurement Plan.

20. **Firms**: Most contracts for firms are expected to be procured using Quality and Cost Based Selection Method (QCBS). Consultant assignments of specific types as agreed previously with the Bank in the Procurement Plan may be procured with the use of the following selection methods: (i) Quality Based Selection (QBS); (ii) Selection under a Fixed Budget (SFB); (iii) Least Cost Selection (LCS); (iv) Selection Based on Consultants' Qualifications (CQS), and, exceptionally (v) Single Source Selection (SSS), under the circumstances explained in paragraph 3.9 of the Consultants' Guidelines. The harmonized RFP must be used.

21. **Individuals**: Specialized advisory services would be provided by individual consultants selected through single source selection or comparison of qualifications of at least three qualified candidates. They would be contracted in accordance with the provisions of Section V of the Consultant Guidelines as defined in the annual procurement plan review.

22. **Prior Review Thresholds**: The prior review of procurement actions would be defined in the Procurement Plan. Based on the amounts expected to be transferred to the school based on the *Reglas de Operación*, all procurement under Component 1 would be subject to post review. SEP will inform the Bank of any modification regarding these amounts or any modification of the *Reglas de Operación* that would modify these arrangements.

23. **Project Incremental Costs**: Project Incremental costs would include reasonable expenditures for an efficient Project implementation, administration, supervision, monitoring and evaluation, including costs of SEP's operation and maintenance, but excluding salaries of SEP's official and public servants of the Borrower's civil servants as set forth in the Operational Manual. These activities would be procured using SEP's administrative procedures, which were reviewed by the Bank and found acceptable.

# B. Assessment of Capacity and Risk to Implement Procurement

24. An assessment of the capacity of SEP to implement procurement actions for the Project has been carried out by the Procurement Accredited Staff assigned to the Project. Based on previous experiences and considering that SEP has developed capacity and considering the small amount of the procurement activities supported under Component 1, the Bank defined the procurement implementation risk as Moderate. The risk on procurement would be mitigated with the following activities:

Activity	Responsible	Timing
Procurement for capacity building activities	Bank	Before and during implementation
Procurement of consultants	SEP	Throughout Project implementation
Operational Manual	SEP	Before Negotiations
Independent procurement reviews	SEP	During implementation

# C. Procurement Plan

25. The Plan covering the first 18 months of Project implementation would be prepared by SEP. In regards to Component 1, this Plan would show the total amount that is expected to be transferred from the national trust fund (FNEC) to the state trust funds (FEECs) to cover the direct support to schools. This Plan was approved by the Bank prior to Negotiations. Subsequently, when direct support to schools have actually been distributed, the Plan would be updated to reflect, among other things, the use of funds by the participating PEC schools, which is reported by the schools as part of their *Ruta de Mejora* that is presented to CTE, CTPS and AEL.

# D. Frequency of Procurement Supervision Missions

26. In addition to the prior review to be carried out by the Bank, the capacity assessment has recommended: (a) one full supervision mission per year; (b) supervision by SEP procurement staff; and (c) annual independent reviews or ex post reviews by the Bank.

# E. Social

27. The proposed Project would have a positive social impact, as it would improve managerial capacity and parental participation in public basic education schools and contribute to reducing dropout failure and repetition rates, which are highly correlated with the most poor and vulnerable in the country. PEC will continue to target all public basic education schools and to prioritize marginalized and indigenous schools; however, given that projects such as PETC have been introduced more recently and with a stronger focus on schools situated in rural, marginalized and indigenous communities, it is likely that the share of PEC indigenous and PEC marginalized schools would stagnate or decrease slightly during Project implementation. Since the proposed Project would focus on supporting the policy of school based management also

through PETC, the overall number of indigenous and marginalized schools is expected to increase.

28. The Project triggers OP/BP 4.10 (Indigenous Peoples) since it has a national coverage that includes indigenous schools. An Indigenous People's Plan (IPP) was developed based on previous operations' experiences and the targeting mechanisms defined by PEC and PETC. The IPP has 5 specific objectives and different strategies to guarantee that concrete actions are taken to ensure that indigenous schools benefit from the Project interventions at least at the same rate as the rest of the schools in the country. The preparation of the IPP included a consultation process with school directors, teachers, parents, and students at indigenous schools in 5 states (Estado de México, Morelos, Puebla, Hidalgo and Guerrero). The IPP incorporates their feedback and recommendations accordingly and in line with the Project's scope. A draft of the IPP, satisfactory to the Bank, was disclosed on June 26, 2014 on the Bank's and SEP's website.

# F. Environmental (including Safeguards)

29. The proposed Project is not expected to have any adverse environmental impacts. Therefore, the Project environmental rating is C and triggering OP/BP 4.01 (Environmental Assessment) is not required. The direct support to schools under Component 1 of the Project is insufficient to undertake construction of new buildings or major additions to existing structures. Hence, the proposed Project would only support minor civil works at participating schools (minor repairs, and maintenance) that would be conducted according to the environmental, health and safety guidelines included in the Operational Rules of PEC, which are mandatory for all participating agencies.

# **Project Monitoring and Evaluation**

30. Mexico has improved its education monitoring and evaluation systems significantly over the past years. National institutions such as INEGI and INEE periodically conduct different evaluations and studies and generate reports about the state of Mexico's education, its main outcomes, and indicators. Additionally, SEP produces sectorial information, such as the *Estadísticas 911* reports, which include data on enrollment, failure, repetition and dropout rates, among others. Useful and reliable information is also derived from national<sup>18</sup> and international standardized tests and made publicly available.

31. The DGDGIE would be responsible for the monitoring and evaluation of the Project, with inputs from each of the units implementing the Project (see Annex 1). The DGDGIE would send Biannual Progress Reports to the Bank, including on progress toward targets in the Results Matrix. The DGDGIE would also be responsible for assessments of the programs and for research and innovation.

32. The first two PDO level results indicators: (i) proportion of basic education schools in programs to strengthen SBM (PEC and PETC) with a director that has a "sufficient" level of

<sup>&</sup>lt;sup>18</sup> The ENLACE test will not be implemented during the 2013-2014 school year; INEE is in the process of designing a test that will replace it.

managerial capacity; and (ii) proportion of PEC schools with parents' associations participating in the design, monitoring, and adjustment of the school improvement plan (*Ruta de Mejora*) would require new data collection, which has already been planned and budgeted by SEP for the first semester of the 2014-15 school year. The proportion of basic education schools in programs to strengthen SBM (PEC and PETC) with a director that has a "sufficient" level of managerial capacity would be measured through a newly developed instrument that would be piloted in a representative sample of PEC and PETC schools in November 2014 by a firm that would be hired to collect the baseline. A firm would also be hired to collect follow-up data on an annual basis to monitor this Project indicator. Parental participation would be monitored through the proportion of PEC schools with parents' associations participating in the design, monitoring, and adjustment of the school improvement plan. The baseline for this indicator was set based on the School Based Management Project (APL II) PEC's survey for school stakeholders (school directors, teachers, parents and students) conducted in 2011-12. A firm will be hired to collect the follow-up data to monitor the Project's performance regarding this indicator.

33. The other three PDO indicators: dropout and gross failure rate among basic education schools participating in school based management programs (PEC and PETC/primary and secondary) and repetition rate among secondary schools in programs to strengthen school based management (PEC and PETC), would be obtained from available information generated by the GoM, as specified in Annex 1. The targets for this three outcome indicators are rather modest, mainly due to concavity and also because throughout the length of the Project, larger impacts are expected on social participation and schools' managerial capacity rather than in dropout, failure and repetition, which will see greater benefits in the long run.

34. Component 3 of the proposed Project would support assessments, research and innovation of the new interventions to obtain knowledge of their possible long-term impact on educational attainment.

# Role of Partners (if applicable)

Not applicable

# Annex 4: Operational Risk Assessment Framework (ORAF)

Mexico School Based Management Project (P147185)

Project Stakeholder Risks							
Stakeholder Risk	Rating	Moderate					
different institutional and technical							
	Resp: Client and Bank	Stage: Implementation	Recurrent:	D	ue date:	Frequency:	Status: Not Yet Due
<i>Description:</i> Stakeholders may lack the capacity to exert their new rights and responsibilities regarding school based management. In addition, there is a risk of 'inertia' from stakeholders at the school, supervision and state levels to continue with old practices instead of embracing the new policies and practices related to school autonomy and accountability. In particular, this Project will highly depend on <u>school supervisors</u> (who until now have not being directly involved in supporting their school directors' skills or receiving formal capacity building for this purpose) to implement the interventions to improve school directors' managerial capacities.	To mitigate the schools particle capacity buildi at different le continuous con participation (for the <i>Consejos Es</i> (SEB) is alignin through continue Resp: S Client and In Bank	is risk, the Proj pating in SBM ng. In addition vels (including nsultations. Sup or example suppo colares de Partia g incentives at di ous consultations	I programs the Sub-se for superv port to scho porting parenta cipación Soci fferent levels	and ware cretariant visors) and interview of the cretariant of the	ill provide t t of Basic Ed and creating ors will also t pation in deve S). In addition ing supervisors	hem tailored te lucation (SEB) i ownership and focus on effective eloping a school p the Sub-secretar	s aligning incentives consensus through ely encouraging social blan and working with iat of Basic Education

Governance	Rating	Low					
<i>Description:</i> Potential mismatches between SEB's federal operation and the state and school- level operation. The quality of the intervention might not be homogeneous across states and this might affect the implementation of key activities.	<i>Risk Management:</i> Overall DGDGIE (the implementing agency) has a strong institutional capacity and proven track record of satisfactory implementation of similar Bank projects, including good coordination among different stakeholders. The SEB is working closely with states and is setting up a system to better understand states' particular needs in order to provide them with the tailored support and technical assistance required to take more responsibility (decentralization) and be able to further devolve tasks and responsibilities at the school level.						
	Resp: Client						
Project Risks		I	1				
Design	Rating Moderate						
<i>Description:</i> This Project builds on the success of the PEC program and incorporates lessons learned. Therefore, the Project design should entail no major risks. Nonetheless, the following issues were identified in the proposed components:	<i>Risk Management:</i> The Implementing Agency has always carried out the projects satisfactorily and has the adequate resources to continue doing so. The Bank Team is working closely with the Client to assure that all technical and research activities take place in a timely manner. Additionally, the following mitigation measures will be used:						
Component 2: The instrument to measure school directors' managerial capacities and the toolkit for school supervisors/directors may not respond to all the different types of school needs. Additionally, there may be a lack of capacity to provide homogenous and quality capacity building for the use of the toolkit.	Component 2: Focus groups have been carried out to ensure that the instrument to measure schools' managerial capacities and the toolkit meet directors and supervisors' needs and that the toolkit is adaptable to the different school contexts. The toolkit will also be piloted in a nationally representative sample.						
Component 3: There has always been a challenge of randomization in the				e recently been modifie l enable a more rigorou			

evaluation of the Project.		with the Client to draft the TORs of programs' assessments and to establish a dialogue with some states to insure randomization of the sample in a small number of states.					
	Resp: Bank and Client		stage: Both	Recurrent:	Due Date:	Frequency:	Status: In Progress
Social and Environmental	Rating	Mod	lerate			•	•
<i>Description:</i> No environmental risks are overseen under this operation.	An Indigen	<i>isk Management:</i> n Indigenous Peoples Plan (IPP) has been prepared, consulted and disclosed both in country and on the ank's website and will be implemented to ensure the inclusion and participation of these peoples.					
Indigenous people might not benefit directly from PEC and PETC at the same rate as in previous stages of the APL from this phase.	Resp: Bank		tage: Both	Recurrent:	Due Date:	Frequency:	Status: In Progress
Program and Donor	Rating	Low	7		•		
Description: There are no Program and Donor risks	Risk Manaş	gemen	nt:				
foreseen.	Resp:	St	tage:	Recurrent:	Due Date:	Frequency:	Status:
Delivery Monitoring and Sustainability	Rating	Μ	Ioderate				
Description:	Risk Management:						
delivery and M&E and therefore no risks	Even though PEC budget has decreased and this could continue in subsequent years, the education reform has clearly strengthened school autonomy and school based management and SEB is introducing more policies and initiatives to foster school autonomy. Furthermore, the government has made it clear that it is continuing financial support for PEC in the short-medium term. Therefore, the sustainability of the Project					ntroducing more ade it clear that it is	

	and its in	itiativ	es will not like	ely be jeopardiz	ed.			
Project mainly due to the creation of programs that, among others, are also now	Moreover, the Project's widened focus on the system will maintain its relevance even as specific models evolve or shift. The Project is being designed with the explicit purpose of providing lessons for spearheading the implementation of the Reform and the new laws for school autonomy making it less likely that PEC (or an evolution of it) will not be sustained after the credit comes to an end.							
addressing school based management. However, overall PEC has special relevance given the reform's focus on applying school based management and it will not likely be discontinued in the short- medium term.			Stage: Both	Recurrent:	Due Date:	Frequency :	Status:	In progress
Overall Risk								
Implementation Risk Rating: Moderate								
Description: The Overall Preparation Risk i	s Moderat	e.						

# **Annex 5: Implementation Support Plan**

# **Strategy and Approach for Implementation Support**

1. The strategy for Implementation Support has been developed based on the nature of the Project and its risk profile. The purpose of this Implementation Support Plan (ISP) is to focus on the inputs and actions required to facilitate better risk management, better results, and increased institutional development, while ensuring compliance with the Loan Agreement to meet the Bank's fiduciary obligations. The ISP would be reviewed once a year and revised as necessary to ensure that it continues to meet the implementation support needs of the Project.

# **Implementation Support Plan**

2. The Bank would conduct at least two implementation support missions per year to ensure that the implementation counterparts are satisfactorily staffed with qualified technical, procurement, financial management, and safeguards specialists and that appropriate capacity building in their respective fields of expertise is provided. The Bank will maintain regular contact with the implementing agency to monitor the Project's progress and to identify implementation issues and resolve them in a timely manner.

3. The Bank would conduct periodic Financial Management (FM) supervision missions and support would be provided on a timely basis to respond to Project needs. The Project would be annually audited by an acceptable audit firm in accordance with terms of reference acceptable to the Bank. Procurement supervision would be carried out annually and would include annual independent reviews.

4. Table A5.1 below indicates the main areas of implementation support during different phases of the Project.

Time	Focus	Skills Needed	<b>Resource Estimate</b>	Partner Role
First twelve months	Project start-up, execution of Procurement Plan, hiring of auditors	Task Team Leader Education Spec. Procurement Spec FM Specialist Environment Specialist Social Specialist	6 staff weeks 6 staff weeks 3 staff weeks 3 staff weeks 1 staff week 2 staff weeks	N/A
12-24 months	Formal implementation support and field visits; follow-up to ensure safeguard measures and arrangements are	Task Team Leader Education Spec. Procurement Spec FM Specialist Environment Specialist Social Specialist	4 staff weeks 4 staff weeks 2 staff weeks 2 staff weeks 2 staff weeks 2 staff weeks 2 staff weeks	N/A

 Table A5.1: Main Focus in Terms of Support to Implementation

24-48 months	followed and that activities would focus on the implementation of the IPP Formal implementation support and field visits; follow-up to ensure safeguard measures and arrangements are followed and that activities would focus on the implementation of the IPP	Task Team Leader Education Spec. Procurement Spec FM Specialist Environment Specialist Social Specialist	4 staff weeks 4 staff weeks 2 staff weeks 2 staff weeks 2 staff weeks 2 staff weeks 2 staff weeks	N/A
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# Table A5.2: Skills Mix Required

Skills Needed	Number of Staff Weeks	Number of Trips	Comments
Task Team Leader	30	Two Supervision	Task and team
		Missions per year	leadership
Education Specialist	30	Two Supervision	Technical review of
		Missions per year	Project Documents
			and Monitoring and
			Evaluation
Procurement	16	One Supervision	Procurement support
Specialist		Mission per year	and supervision
Financial	16	Two Supervision	FM and disbursement
Management		Missions per year	support and
Specialist			supervision
Environment	10	Two Supervision	Environmental
Specialist		Missions per year	support, supervision,
-			and reporting
Social Safeguards	10	Two Supervision	IPP support,
Specialist		Missions per year	supervision, and
			reporting

# Table A5.3: Partners

Name	Institution/Country	Role
N/A	N/A	N/A

#### **Annex 6: Economic and Financial Analysis**

1. International and national evidence continuously shows the most solid empirical results in economics: for individuals and for countries as a whole, more education increases human capital, which results in an increase in productivity. A more productive individual enjoys higher wages, and a more productive society shows higher long-term growth. Therefore, not only does the provision of education matter in order to increase the opportunities of individuals in these communities, but also, it will increase the quality of education as well as other resources to leverage the disadvantages of these students. The expansion of SBM policy has the double benefit of boosting productivity while reducing poverty and inequality by ensuring a better schooling trajectory for the most disadvantaged population.

2. The economic and financial analysis consists of four parts, each answering the following questions: i) what is the Project's developmental impact? ii) are public sector provisions or financing the appropriate vehicle? iii) is there any reason to think that the noise, with which we estimate our parameters, affects our conclusions (sensitivy analysis)? iv) What is the World Bank's added value?

# Part I: What is the Project's development impact? Economic Benefits for Poor Urban and Indigenous localities in Mexico

3. At the macro perspective, pro-poor policies such as education or cash conditional transfers increase human capital for the most disadvantaged population, which is translated into higher rates of economic growth. The impact of such policies can be easily measured by an augmented Solow model. Similarly, at a micro level, the gains in human capital turn into higher wages, salaries or incomes, and lower poverty rates; if the program is targeted to a disadvantaged population, it will also have an impact on the reduction of income inequality. For example, De Hoyos (2010) analyzes the consequences of the lack of education reforms during the 70's in Mexico. The author argues that if during the 70s an educational reform had happened, the result would have been an increase of 28 percent of the annual income of Mexican families by 2010, which is translated to a decrease in poverty of 6.8 million Mexicans.

4. To begin with this analysis let us define the Mincer equation that relates years of schooling with personal labor remunerations in the population:

$$\ln(Y_i) = \hat{\alpha} + \hat{\beta}_1 S_i + \sum_{j=2}^J \hat{\beta}_j X_{j,i} + \hat{\varepsilon}_i$$

5. Where  $Y_i$  is the personal labor income or wages of individual "i",  $S_i$  is the years of schooling of "i",  $X_j$  are controls,  $\hat{\alpha}$  and  $\hat{\beta}s$  are estimated parameters and  $\hat{\varepsilon}$  are the estimation error terms. The Mincer equation, which calculates the returns to schooling, is the microeconomic foundation of the macroeconomic association between human capital accumulation and GDP growth on which the augmented Solow Growth model developed by Mankiw et al. (1992), is based.

6. The Mincer equation has been estimated in several studies for Mexico. The majority of the studies use data from Household Income Expenditure Survey (ENIGH, from its acronym in Spanish) to estimate the returns to Education in Mexico, when possible, a separate set of parameters are estimated for urban and rural areas.<sup>19</sup> According to Bracho & Zamudio (1994), on average, an extra year of schooling increases the hourly wage by 11.7 percent. Barceinas (1999) estimates this figure to be 12.8 percent. Taylor & Yunes (2000) estimate a return of 5.5 percent per every year of schooling controlling for agricultural and non-agricultural activities. Patrinos & Garcia (Forthcoming) estimate the returns to education for indigenous people as 5 percent per extra year of schooling, while for the non-indigenous population the return calculated is 12 percent.

7. Given that our estimates are in-line with those of the literature reported for disadvantage population such as Patrinos & Garcia (Forthcoming), we will take our own calculation when estimating the economic benefits brought about by the SBM policy. The second step is to estimate the additional years of schooling in non-rich urban, semi-urban and semi-rural communities where the program is targeted. In order to do the above-mentioned, the time horizon of the analysis will be defined as the period between 2019 — the year when the Project finalizes—and 2037—when a significant proportion of the Project's targeted population will be participating in the labor market.

8. To estimate the Project's impact on years of schooling through decreasing dropout rates, we take the estimates found in Shapiro & Skoufias (2006). They found that the SBM program reduces dropout rates by 24 percent using a difference-in-differences model with matching. The dropout rate for SBM for the 2011-2012 was 4.2 percent, taking the dropout reduction estimated in Shapiro & Skoufias (2006). This would mean a reduction of 1.0 percent (=4.5\*.24 percent) the first year, after project implementation. At the end of the four years, the dropout rates would be 1.5 percent, which will imply 3 percent more of completion rate by the end of the Project of the relevant population. In other words, on average 3 percent of the targeted population would have 3 more years of schooling, vis-à-vis the years of schooling that same cohort would have in the absence of the Project. Under simplified assumptions, this means that those non-rich generation located in urban and semi-urban areas after project completion would have additional 0.09 (=3\*0.03) years of schooling vis-à-vis the years of schooling that the same cohort would have in the absence of the Project.

9. The Mincer equation described above can help us attach a monetary value to the increase in years of schooling brought about by the Project. Notice that the returns to schooling reported above are estimated using observations from a representative sample of the entire labor force on targeted areas not only new entrants to the labor market (youth). Therefore, the increase in 0.09 years of schooling among the first generation of 15 years old beneficiaries after Project implementation would have a marginal effect on the overall years of schooling in the targeted areas. Assuming this first generation of beneficiaries enters the labor market in 2022, their additional years of schooling would increase by 0.002 (=0.09/45) or 1/45 of the original increase, assuming a labor force composed of individuals between 20 and 65 years of age. As time passes and more project beneficiaries enter the labor market, the overall effects of over years of

<sup>&</sup>lt;sup>19</sup> The ENIGH is a nationally-representative micro household survey data, as well as urban and rural representative.

schooling in rural areas increases until it reaches 0.032 additional years of schooling in urban, semi-urban and semi-rural areas in 2037 as is shown in Figure 1.

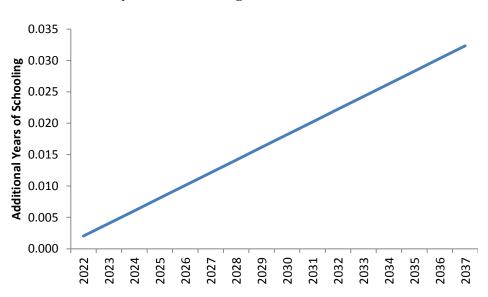
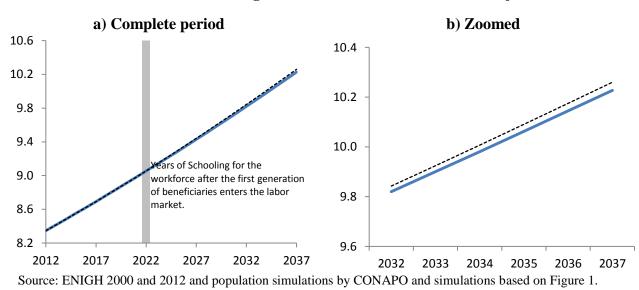


Figure 1 Additional years of schooling in urban areas due to SBM

10. According to the ENIGH 2012, the workforce in Mexico urban, semi-urban and semirural areas have on average 8.3 years of schooling. This contrasts with the 5.5 years of schooling found in rural areas. As it is shown in Figure 2a, the long term trend in years of schooling on the above mentioned population is positive with no apparent signs of reaching an inflection point in the short to medium term. Projecting this trend in a "business as usual scenario" (i.e. of years of schooling without SBM improvements) shows that by 2037, the workforce in urban, semi-urban and semi-rural will get 10.23 years of schooling. Figure 2a shows the projected scenario.

Source: Author's own computations based on population projections from CONAPO.

Figure 2 Years of Schooling in Mexico with and without the Project



11. With the expansion of the SBM program and its potential effects on urban, semi-urban and semi-rural areas, the average worker will have an additional 0.032 years of schooling in 2037 reaching 10.26 years of schooling, according to our calculations (Figure 2b). Although this seems to be a small change, it is far from being trivial. For instance, according to the ENIGH 2012, the average annual household per capita income in urban, semi-urban and semi-rural areas in Mexico is MX\$144,525.7 pesos of 2012. Assuming a return to the additional year of schooling in these localities of 4.5 percent, every generation of project beneficiaries would experience an average increase of MX\$585.23 (=MX\$144,525\*0.045\*0.09) per year vis-à-vis the labor remuneration that the same generation would have obtained in the absence of the Project. The monetary effects for the affected fraction of the workforce of the increase years of schooling brought about by the expansion of the Project is defined by the following expression:

$$B_t = Y_t * \hat{\beta} * \Delta S_t * P_t^r$$

where  $B_t$  is the monetary benefits of the Project at time "t",  $P_t^r$  is the rural workforce,  $\Delta$  is a change operator capturing the effects of the Project as depicted in Figure 1;  $\hat{\beta}$  and  $S_t$  are defined as before. Using the expression and assumptions above, plus an urban, semi-urban and semi-rural workforce of 59.0 million, in 2022 around 14.6 million will be affected by the expansion of the SBM program. Additionally, the monetary benefits of the Project after one year of completion are equal to MX\$191.6 million (=MX\$144,525\*0.045\*0.002\*14.6 million), at prices of 2012.<sup>20</sup> As more project beneficiaries enter the labor market and the additional years of schooling of the urban, semi-urban and semi-rural workforce increase ( $\Delta S_t$ ), the economic benefits of the Project also increase as is shown in Figure 3. The sum of the flows of economic benefits up to 2037

<sup>&</sup>lt;sup>20</sup> Figures may differ due to rounding.

amount MX\$29.5 billion or US\$2.2 billion at the official exchange rate of MX\$13.5 per dollar (May. 22, 2014).

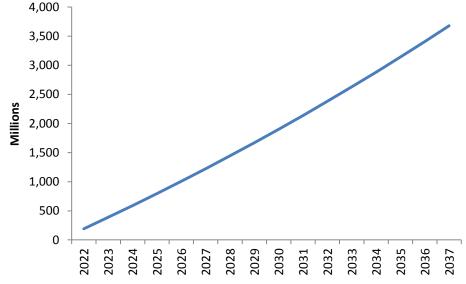


Figure 3: Economic benefits of ECD and IPAs \$MX of 2012

Source: author's own computations based on the formula for monetary benefits of the Project

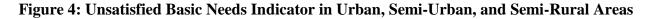
12. The benefits of the expansion of the SBM program to a national level go beyond the increase of school completion. For example, Shapiro & Skoufias (2006) find that dropout rates not only go down by 24 percent but also failure rates decrease 31 percent in SBM schools. In the same study, it was found that students identified improvements in infrastructure and increase in parental involvement; nonetheless, teacher and director participation did not improve in SBM schools. Murnane et al. (2006) find an even greater decrease in dropouts and failure rates. Gertler et al (2010) find that teachers reported an increase in the time spend on administrative tasks and more time with students who were lagging behind. In addition, Gertler et al (2010) found more engagement by teachers in schools' problems. This is important because as Hanushek & Woessmann (2008) show, there is a positive relation between education quality and earnings. In terms of our estimated Mincer equation, this would mean that the improvements in education services would translate into an increase in the returns to schooling calculated by the  $\hat{\beta}$ parameter. Therefore, quality of education will increase economic returns in the treated population in the long run. In these regards, it is crucial to identify factors that increase education quality, especially those that are policy-relevant in order to have long-run social gains.

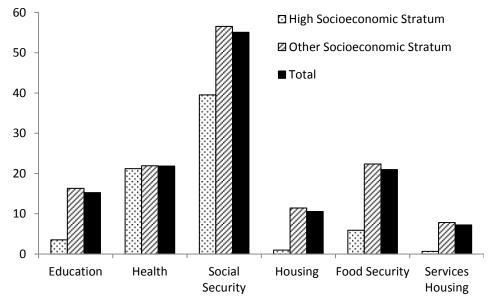
#### Part II: Is public sector's provision or financing the appropriate vehicle?

13. No rich, urban, semi-urban and semi-rural population accounts for 70 percent of the total Mexican population in 2012. Since Mexico is in the trend of improving its educational quality by implementing SBM interventions, it is important to target a large part of the Mexican population that is in disadvantage compared with the high socioeconomic stratum. The main reason is that without sound educational policies that explicitly target this population, the inequality gap will

continue to increase, which will result in the exclusion of a large proportion of the Mexican population from the development process.

14. In Mexico, around 74 percent of the population faces at least one type of backwardness indicator.<sup>21</sup> Figure 4 shows the percentage of households that present one type of backwardness indicator in urban, semi-urban and semi-rural households by high socioeconomic stratum and other socioeconomic stratum.<sup>22</sup> The main take away from Figure 4 is that there is an important gap between high socioeconomic stratum and other stratums. In particular, there is an important gap in education which is a key variable for the future development of an individual, since we have seen education is related to future income. For example, years of schooling among the workforce (captured by the individuals ages 21 to 30) differ substantially between high socioeconomic stratum and other socioeconomic stratum in urban, semi-urban and semi-rural localities – the difference in years of schooling using the ENIGH 2012 between these two populations is 4.6 years. Therefore, closing the gap between high and other socioeconomic stratum in education is important to have a more egalitarian society.





Source: Authors own making with data from the ENIGH 2012

15. In 2012 there were approximately 50 thousand schools under the PEC program. The National Council for Evaluation of Social Development (CONEVAL, by its acronym in Spanish) reported that the cost of the PEC program was MX\$1.67 billion per year in 2012. Hence, the unitary cost per school, including administrative costs, in 2012 was MX\$33.6 thousand (=MX\$1.67 billion/49.7 thousand). Assuming an expansion to cover the entire targeted

<sup>&</sup>lt;sup>21</sup> The indicators that CONVEAL uses to measure poverty can be found in: http://blogconeval.gob.mx/wordpress/index.php/tag/rezago-educativo/

<sup>&</sup>lt;sup>22</sup> Other socioeconomic stratum is formed by very low, low and medium socioeconomic stratum of the ENIGH 2012.

population for basic education in primary and secondary schools, according with PEC rules of operation 2013-2014, the program cost will go up by MX\$549 million per year.<sup>23</sup> The cost of running four years the program will be MX\$2.1 billion (=MX\$4\*549 million).

16. The PETC had around 6.7 thousand school in 2012. The CONEVAL estimates that the cost of the program in 2012 was around MX\$2.5 billion per year. The unitary cost of schools, including administrative costs, was MX\$373.9 thousand in 2012. The government's plan is to increase the number of schools by 24.7 thousand by 2018. Assuming the expansion takes place in a steady trend and that the government meets 70 percent of its target, the cost will be MX\$16.1 billion.

17. Since the expected earnings on urban, semi-urban, and semi-rural communities affected by the program are calculated in MX\$29.5 billion and the cost of a four year period for both programs is MX\$18.2 billion (=MX\$16.1 + 2.1 billion). The net return of the program is estimated in MX\$11.3 billion. This makes the expansion of SBM programs financially and socially sound. Finally, assuming that half of the people enter to the formal labor market paying a tax rate of 30 percent percent of the income received, the federal government will receive tax contributions from the labor force for MX\$4.4 (=29.5\*0.5\*0.3) billion or 24.3 percent of the total program cost.

18. The expansion above described is based in the rules of operation that the Government of Mexico (GoM) is implementing for PEC and PETC programs based on the new educational reform the GoM is trying to accomplish. The World Bank will contribute by ensuring to keep the right track, in specific on the SBM National Policy. Since the expected earnings of GoM programs are MX\$29.5 billion, and the estimated cost is MX\$ 18.2 billion. The rate of return per year (or compound annual growth rate) is equal to 1.95 percent per year for the projects. The rate of return *r* is calculated by  $r = (FV/PV)^{1/years}$  where: FV is the future value or returns of the programs, PV is the present value of the program or cost, and *years* is the number of years from 2022 to 2037, the time frame when the majority of the expected gains are supposed to occur.

19. For the purpose of this analysis we are interested in the return of the Mexico School Based Management Project (P147185). This Project's total cost is US\$785 million, where US\$300 million will be finance by the International Bank for Reconstruction and Development. The rate of return is expected to be on average equal to one of the broader project (the reform project). This would mean that the US\$300 million invested will generate US\$486.2 (=US\$300[1+0.0195]<sup>25</sup> million) or a return of US\$186.2 million for the bank loan making the loan of the World Bank and important contribution in Mexico's strategy towards the inclusion of the more disadvantaged sectors.

<sup>&</sup>lt;sup>23</sup> The new targeted population according to the 2013-2014 operating rules is all schools that want to participate in the PEC. For estimating the extra cost of the PEC all public schools that took ENLACE standardized test were taken into account, this in order to have the upper bound cost of the program.

#### Part III: Sensitivity Analysis

20. To estimate how the expansion of SBM affects the fiscal balance of the federal government, we will first assume that our estimation has some noise attached to it. In particular, we will focus in this section on the worst case scenario assuming a low educational return to the programs. For this reason, instead of taking the baseline scenario of 24 percent decrease of dropout rates, the hypothetical scenario would be a decrease of dropout rates of 13.6 percent. The decrease of 10.5 percent points from the baseline scenario is the result of changing the parameter by two standard deviations, according to Shapiro & Skoufias's (2006) standard error of 0.052. As calculated before, this would mean a reduction in dropouts of 0.6 percent (=4.5\*.136 percent) the first year after the Project's implementation. At the end of the four Project period, the dropout rates would be 2.5 percent, which will imply 2.0 percent more of completion rate at the end of the Project of the relevant population. This means 0.06 (=3\*0.02) more years of schooling vis-à-vis to the generation that was not included in the program. Under this stress scenario the the program per year after full completion will be return of MX\$390.21 (=MX\$144,525\*0.045\*0.06) per year vis-à-vis the labor remuneration that the same generation would have obtained if the Project was not implemented.

21. The monetary benefits attached to the proposed Project after one year of completion is equal to MX\$127.3 million (=MX\$144,525\*0.045\*0.00134\*14.6 million). Additionally, under this scenario, the total flow up to 2037 will be in the order of MX\$ 19.6 billion or US\$1.4 billion at the official exchange rate of MX\$13.5 per dollar (May 22, 2014). Since the cost associated with the program is calculated in MX\$18.2 billion, even under the stress scenario, it is convenient to implement the program expansion, due to the fact that the expected returns are in the order of MX\$1.4 billion, or r=0.30 percent. This would mean that in 2037 the added gains of the World Bank loan will be US\$ 323.3 million (=US\$300[1+0.003]<sup>25</sup> million) or an expected return of US\$23.3 million of the loan.

22. Finally, it is important to mention that the estimated net revenues represent a lower bound since they are the sum of personal monetary benefits of individuals that took part on the SBM expansion program based on dropout rates. Nonetheless, as Hanushek and Woessmann (2007) identify, there are other characteristics that SBM programs have that can affect students' achievement, such as school competition, autonomy, and accountability, which De Hoyos (2010) demonstrates can have a larger effect in the long-run economic growth.

# Part IV: What is the World Bank's added value?

The World Bank will contribute to Mexico's long-term development trend by supporting SBM. The expansion of the SBM will support the recent Educational Reform in Mexico to increase the quality of education and equity goals. The World Bank's involvement will come in the form of sharing best international practices with teachers, school directors, parents, advisors, supervisors, and the community in general. Finally, the design of the program will strengthen the accountability and transparency the federal government aims to improve. The World Bank will bring its expertise on assessments, research and innovation design, implementation, follow-up, interpretation of results, and feedback to policy design.