

Impact Evaluation of a Parental Empowerment Program in Mexico BNPP PPP Education Synthesis Report

June 2009

Prepared by:

Harry Anthony Patrinos, Education, Human Development Network, World Bank

1. Description of the Project

The arguments for increasing parental participation at the school level are that it will make teachers value children's welfare more; that human, financial and material resources will flow to the school by virtue of parental support; and that children will learn that attending and doing well in school are highly valued. While there is some evidence on the performance of parental participation, little is known about its benefits in terms of learning outcomes. Even fewer are based on rigorous impact evaluation techniques. None it would appear is measuring learning outcomes through rigorous evaluation techniques of a large-scale program. Mexico is following the international trend of trying to improve educational outcomes in disadvantaged rural areas by decentralizing education decision-making through increased parental and community involvement in schools. The argument is that decentralizing decision-making authority to parents fosters demand and ensures that schools provide the benefits that best reflect their priorities.

Mexico's compensatory education program began in the early 1990s. It is now implemented by the National Council for Educational Development (CONAFE), a division of the Secretariat of Public Education. The school-based management (SBM) component, or AGEs, started in 1996 and consists of monetary support and training to Parent Associations (APFs). The APF can spend the money on the educational purpose of their choosing although spending is limited to small civil works and infrastructure improvements. AGEs increase school autonomy through improved mechanisms for participation of directors, teachers and parent associations in the management of schools. The AGEs financial support consists of quarterly transfers to APF school accounts, averaging \$600 per year according to school size. An expansion of AGEs is being implemented through an experiment in four states. Participating schools will receive double the usual amount. The project will be implemented in 125 schools.

Half of the money will be financed by government through its usual support to these schools, all of which are already beneficiaries of the compensatory program. The other half will be provided by the private sector, including Cinopolis, Deutsche Bank Mexico, Fundación Televisa, Lazos and Western Union. Supervision of the overall experiment will be supported by the NGO Investing in Education Foundation. We propose to take advantage of the fact that national standardized test score (ENLACE) information is collected for all students to assess the impacts of the program on student learning.

The relationship between extra funding, participation and outcomes will be investigated. AGEs schools that will receive extra grants will be comparing to a group of similar AGEs schools that will not receive the extra grant. We will test whether additional grants improve outcomes. We hypothesize that increasing school grants will improve student performance and learning through more involved school improvement plans. We will use experimental data to address the following questions: (1) Does the increased AGEs grant further parental participation? Does parental participation improve teacher effort? Does the increased grant improve teacher effort? Surveys will be applied to treatment and control school parents, students, teacher and school directors, to ascertain, among other things, parent knowledge of the school plan; parental participation in development of the plan; how informed parents are about student performance; parental involvement in decision-making; teacher encouragement of student participation and performance; teacher absenteeism. (2) Does the increased grant lead to reduced repetition, dropout and failure rates? (3) Does the increased grant lead to improved learning outcomes, as measured by math and reading scores over time using ENLACE. The focus will be on grades 3, 4, 5 and 6.

2. Literature review

Parental participation in school affairs can be seen as a moderate form of school-based management (SBM), which is the decentralization of authority to the school level (World Bank 2008a, b). Responsibility and decision-making over some aspects of school operations is transferred to parents, who must conform to, or operate within, a set of centrally determined policies (Caldwell 2005). SBM has become a very popular movement. A number of countries including New Zealand, the United States, the United Kingdom, El Salvador, Nicaragua, Guatemala, the Netherlands, Hong Kong (SAR), Thailand and Israel have instituted SBM.

However, there is little empirical research with few rigorously evaluated cases – none of which is randomized (World Bank 2008a, b).

The empirical literature on SBM points to some impact on enrollment, dropout rates, parental involvement and student achievement. Parental involvement appears to increase, although the evidence is not overwhelming (Jimenez and Sawada 2003, 1999; Di Gropello 2006; Drury and Levin 1994). Teacher effort, measured by days worked or parent-teacher meetings, appears to increase in some cases, but not others (Di Gropello and Marshall 2005; Di Gropello 2006). El Salvador's EDUCO (Educación con participación de la comunidad) program gives parent associations the responsibility for hiring, monitoring, and dismissing teachers. In addition, the parents are also trained in school management, as well as on how to help their children with school work. Despite rapid expansion of EDUCO schools, education quality was comparable to traditional schools. In fact, parental participation was considered the principal reason for EDUCO's success (Jimenez and Sawada 1999, 2003). Nicaragua's Autonomous School Program gives school-site councils – comprised of teachers, students and a voting majority of parents – authority to determine how school resources are allocated and to hire and fire principals, a privilege that few other school councils in Latin America enjoy. Two evaluations found that the number of decisions made at the school level contributed to better test scores (King and Ozler 1998; Ozler 2001). In a number of diverse countries such as Papua New Guinea, India and Nicaragua, parental participation in school management is associated with reduced teacher absenteeism (for a review see Patrinos and Kagia 2007; Karim et al. 2004).

The evidence on student achievement is mixed and in most cases studies estimating the impact on this measure use weak designs. However, the few studies that use stronger methodological strategies find either improved student achievement in elementary schools or very modest to no differences in test scores. For instance, Hess (1999) suggests that after initial slippage, student achievement is now increasing in Chicago public schools that implemented school-based management programs. He cites that 94 percent of elementary schools had higher percentages of students above the national norms in 1998 than they had at that level in 1990. The gains for the majority of elementary schools had been substantial (between 4-8 percentage points). Students enrolled in Honduras' Community-Based Education Program (PROHECO)

also appear to have higher test scores in science (Di Gropello and Marshall 2005). There is no statistically discernible PROHECO effect on math or language. For Nicaragua, King et al. (1999) found that having more autonomy over teacher-related issues does have a positive and significant effect on student achievement in primary and secondary schools.

Previous evaluations from Mexico are extremely limited, both in number and in robustness. Mexico's urban school-based management program, PEC (Programa Escuelas de Calidad), was analyzed by Skoufias and Shapiro (2006) using panel data regression analysis and propensity score matching. They find that participation in PEC decreases dropout rates by 0.24 points, failure rates by 0.24 points and repetition rates by 0.31 points. Another evaluation of PEC finds the program did lower dropout rates, but not failure rates (Murnane et al. 2006). Neither study, however, analyzed student learning, because the timing did not allow for it, and because it was difficult to match student test scores (which were done on a sample basis), with the evaluation samples they used.

Shapiro and Moreno (2004) conducted an overall evaluation of Mexico's compensatory program using propensity score matching. Mexico's compensatory education program provides extra resources to primary schools that enroll disadvantaged students in highly disadvantaged rural communities. One of the most important components of the program is the school-based management intervention known as AGEs. They found that the intervention improved test scores. Lopez-Calva and Espinosa (2006), with data from 2003-04, and using matching techniques, found that the AGEs have a positive impact on test scores.

An evaluation of the AGEs using pre-program data over time and the phased-in introduction to construct an over-time difference-in-difference estimator, and controlling for fixed effects, shows a significant impact on reducing failure and repetition rates (Gertler et al. 2006). The impact of the AGEs is assessed on intermediate school quality indicators (failure, repetition and dropout), controlling for the presence of the conditional cash transfer program. Results prove that school-based management is an effective measure for improving outcomes. Estimates of the average treatment effect between school years 1998-99 and 2001-02 for failure, grade repetition and intra-year dropout rates, using school year 1997-98 as the pre-intervention year in the

computation of the difference-in-difference treatment estimates, were calculated. Results consistently show a significant effect of AGEs in reducing failure and grade repetition, which is independent of the inclusion of controls for the other education interventions. The point estimates are -0.4 percentage points or, alternatively, a 4.4 percent decrease in the proportion of students failing or repeating a grade in the school. There are no effects of AGEs on intra-year dropout rates.

In an attempt to further justify the importance of the AGEs, qualitative work was undertaken, consisting of discussions with parents, teachers and school directors of beneficiary and non-beneficiary schools in the state of Campeche (for full details, see Patrinos 2006), and a larger survey of school directors in 115 rural schools with AGEs in the states of Campeche, Guerrero, Michoacán, Sinaloa and Tamaulipas (Gertler et al. 2006). In terms of economic and financial benefits, parents argued that AGEs monetary support helped to reduce the household burden associated with sending their children to school. They also argued that the AGEs helped improve school maintenance and that there are more school supplies. In addition, there were arguments that the AGEs help motivate the teacher. Another set of arguments from the parents focused on participation and other social aspects. Parents expressed the view that the AGEs helped generate significantly higher levels of school participation and communication – both amongst parents, and with teachers and school directors. The AGEs help articulate expectations and promote social participation. The AGEs meetings are important for the school as they facilitate dialogue with teachers and school directors. Many parents believe that the AGEs put pressure on school directors and teachers to help their children. Moreover, it is believed that the AGEs may help reduce absenteeism among teachers as they are seen as an economic benefit that helps teachers. The AGEs also motivate parents to follow their children's progress. The school directors' survey reconfirmed that the AGEs lead to improvements. According to the overwhelming majority of principals, the AGEs increase parental participation and make parents more demanding. However, they are more likely to demand higher teacher attendance and more attention to their children's learning needs; not to change grades for undeserving students. Therefore, the qualitative results reconfirm our findings and contention that AGEs improve outcomes through increased parental participation, and probably through increased attention to teacher attendance and student's academic performance.

Thus, while there is some evidence on the performance of SBM programs, little is known about their benefits in terms of learning outcomes in Mexico or elsewhere. (Related research is on-going in the Mexican state of Colima, where we are investigating the medium term impacts of the urban-based PEC program on learning outcomes.) Even fewer studies are based on rigorous impact evaluation techniques or investigate the mechanisms through which SBM might affect student performance. It is also not clear in cases such as the AGEs, where the parental participation is funded through school improvement grants, whether the observed positive effects are due to the extra resources (which in the case of the AGEs are used for small civil works) or the organization and empowerment of parents. In this respect, the current proposal will be relevant beyond Mexico. This piece of research will additionally yield unbiased estimates on the magnitude and direction of the effects of parental empowerment SBM programs on learning outcomes while further focusing on the factors and changes within the school that trigger such impacts. It will, therefore, provide invaluable insights and advice on ways of fine-tuning policies aimed at improving school quality, besides lending empirical credibility to many of the parental empowerment/SBM claims. We believe this is of particular importance now, given the increasing number of countries that are moving forward with efforts to implement empowerment/SBM-type education programs.

3. Evaluation strategy and team actions

We selected a disadvantaged region within a homogenous indigenous area in order to select treatment and control schools with the same probability. In the first stage, we limited the geographical coverage of the experiment to rural areas with a higher share of indigenous population, thus selecting Chiapas, Guerrero, Puebla and Yucatan. The state of Oaxaca, with the highest share of indigenous population was excluded from the sample because of teacher union problems, which led to the closure of schools during most of the 2006, and AGEs funds were not assigned. Similar problems continue to this day, and Oaxaca's schools did not participate in ENLACE in 2006 and 2007, meaning that we do not have a base for comparison in this regard.

From the universe of AGEs schools in the four states, we excluded boarding schools, schools not participating in the ENLACE test, and schools participating in other SBM programs. This left 5,930 potential schools for the experiment. From these 5,930 schools we randomly

selected 250 schools. Randomization led to a distribution of indigenous and general schools close to the actual distribution. These 250 schools have to be in the AGEs program for at least the three years of the duration of the experiment, otherwise it would not be possible to carry out the experiment to isolate the effect of higher funds for half of them. From these 250 schools, we randomly assigned 125 to treatment and 125 to control. Then we checked that schools in treatment and control are as similar as possible, performing t-tests for the means of a series of characteristics. A statistical power calculation indicates that a sample of this size is sufficient to detect moderate schooling impacts – for example, a 2 percentage point decrease of the repetition rate of sixth year students, at 95% confidence with reasonable statistic power of 93%.

3.1. Data Collection

We use the Mexican School Census (Censo Escolar 911) and ENLACE national standardized tests results to measure grade failure, repetition, intra-year dropout rates, and compare academic achievement of children in all 250 schools. Our project obtains information about its impact through questionnaires to 247 school principals, 247 parents, 402 teachers and 8,970 students. The first three surveys intend to assess the degree of parental participation and involvement in school matters. The fourth questionnaire aims to collect detailed data on student's background. Two rounds of surveys have been conducted; one in September 2007 and another in June 2008.

Activity	Date
Baseline surveys	September 2007
1st follow-up surveys	June 2008
2nd follow-up surveys	September 2009
Mid-term research report	December 2009
Endline surveys 2010	June 2010
Final research report	December 2010

4. Preliminary Findings

- The 125 AGE's grants have helped parents to buy school supplies and improve infrastructure.

- Schools getting more financial support show an improvement in communication between principals, teachers and parents.
- Schools receiving extra AGE funds also show slightly higher standardized test scores and more parental participation than schools receiving only the government's grant.

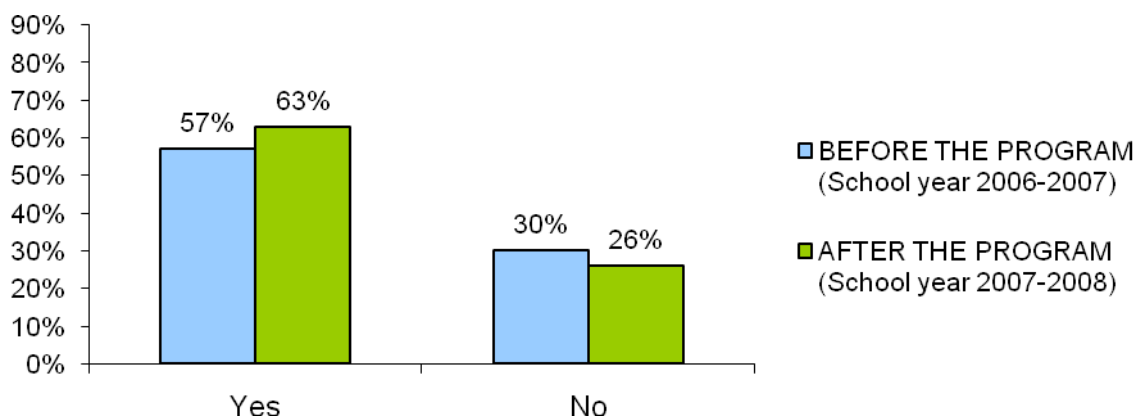
Statistical summary of the schools participating in the 125 AGE program by state (2007)

	<i>Chiapas</i>	<i>Guerrero</i>	<i>Puebla</i>	<i>Yucatán</i>	<i>125AGE</i>
<i>Number of students</i>	3112	4292	2044	457	9905
<i>Girls total</i>	1538	2063	985	220	4806
<i>Failure rate (%)</i>	10.69	9.55	8.58	10.56	9.94
<i>Number of teachers per grade level</i>	2.89	1.03	2.09	1.58	1.78
<i>Students with Oportunidades scholarships</i>	1502	2000	878	258	4638
<i>Primary schools (number)</i>	60	35	25	5	125
<i>Number of schools in areas with high poverty levels</i>	59	32	20	4	115

The 125 AGE Project has benefited 9,905 children from third to sixth grade in 125 primary schools located in Chiapas, Guerrero, Puebla and Yucatán, four of the poorest states in Mexico. Our support has helped parents to buy school supplies and improve infrastructure (see Graph 1).

Graph 1. School Supplies

Has the quantity of computers, textbooks, reading books and school utensils increased this school year?

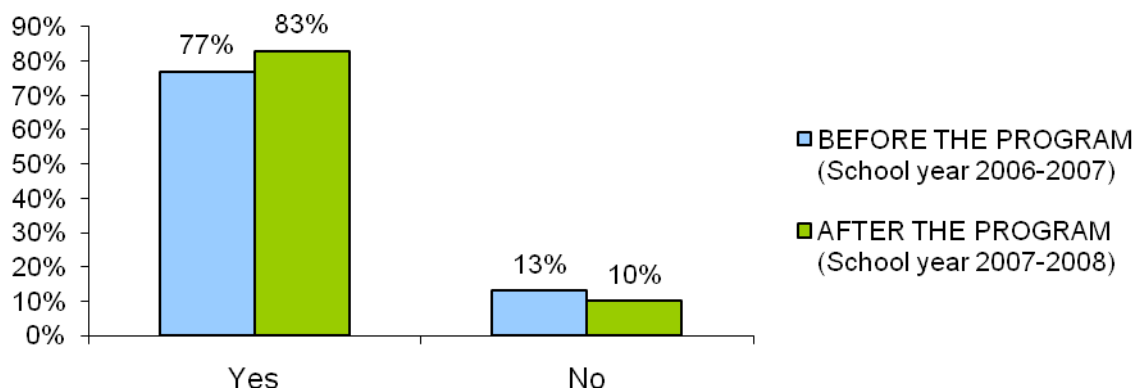


NOTE: This information was drawn from the parents' surveys applied on September 2007 (baseline) and June 2008 (first follow-up) to 247 Presidents of the Parents' Associations in treatment schools.

School stakeholders at treatment schools have also improved their communication. This has likely contributed to generate a better school environment (see Graph 2).

Graph 2. Communication

Has the coordination and communication between parents, teachers and the principal improved this school year?



NOTE: This information was drawn from the parents' surveys applied on September 2007 (baseline) and June 2008 (first follow up) to 247 Presidents of the Parents' Associations in treatment schools.

A year after the project began, schools receiving \$1,200 display slightly higher parental participation (see Annex1, Graph 8) and relations between parents and teacher improved (see Annex 2, Table 6 and 7). At the end of the three-year pilot we expect to observe greater improvements in academic achievement (see Annex 3) at 125 AGE schools.

5. Next Steps

The second follow up survey will be undertaken in September 2009. It was originally scheduled for June 2009 but because of the flu outbreak and school closures, we had to reschedule. After the second follow up a mid-term report will be prepared. The final follow up will take place in June 2010.

ANNEX 1. Teachers' Survey

This information was drawn from surveys applied to 402 teachers on June 2008 in our treatment (125 AGE) and control schools.

(1) Teacher's gender (%)

	Treatment	Control
Male	49.0	51.3
Female	41.1	44.0

(2) Teacher's characteristics

	Treatment			Control		
	N	Average	Std dev	N	Average	Std dev
Age	176	40.9	12.1	181	40.9	12.9
Work experience	176	12.7	9.6	177	13.3	11.1
Age in which teacher started teaching	378	26.1	4.0			
Commuting time to work (minutes)	343	34.0	33.8			
Note: N represents the number of observations; Std dev represents the standard deviation. For the first and second items we present the statistics for both the treatment and Control group.						

(3) Indigenous language

¿Do you speak an indigenous language? (%)

	Treatment	Control
Yes	39.5	39.3
No	54.2	55.0

(4) Residence

Currently do you live in the same community where the school is located? (%)

	Treatment	Control
Yes	33.2	44.0
No	58.4	50.8

(5) Union

Are you a member of the Teachers' Union? (%)

	Treatment	Control
SNTE	71.0	60.5
CNTE	5.3	10.5
Other Union	3.2	3.7

(6) School Improvement Plan (Design)

In this school year that is about to finish, who participated in the design (writing) of the School Improvement Plan? (%)

	Treatment	Control
Principal	6.3	3.1
Teachers	0.0	0.0
Parents	0.0	0.0
Principal and teachers	12.6	16.2
Principal and parents	3.7	4.2
Teachers and Parents	1.6	2.6
All	61.6	56.0
Other	0.0	0.0

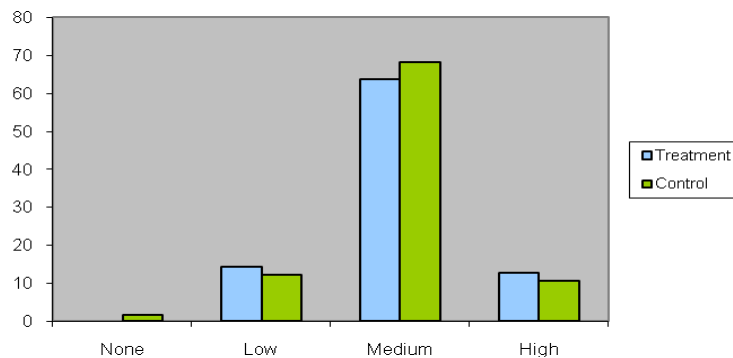
(7) Participants at meetings

From the total number of meetings on the school year that is about to finish, which students' relatives attended mainly to Parents' Association meetings? (%)

	Treatment	Control
Father and mother together	9.0	14.7
Father or mother indiscriminately	21.6	26.7
Mother	50.5	37.2
Father	7.4	5.2
Other (aunts, grandmothers, etc...)	2.1	2.6

(8) Parents' level of participation

Indicate how you think the level of parental participation was in general school matters during this school year (%).



(9) Student Absenteeism

In general terms and during this school year, how would you say that the level of school attendance of students has been...? (%)

	Treatment	Control
Low	5.3	2.6
Medium	42.6	47.6
High	44.2	42.4

(10) Reasons for students being absent

In general terms, what was the main reason for students to be absent from school during this school year? (%)

	Treatment	Control
Work	21.6	15.2
Economic	14.7	18.3
School	0.0	0.5
Material	1.1	0.0
Interpersonal problems	0.0	0.5
Interest	15.3	15.2
Transportation	0.0	0.5
Sickness	27.4	31.4
Rain or other natural hazards	1.6	4.1
Other	1.1	0.5

ANNEX 2. Parents' surveys

The following information was drawn from a survey applied to 247 presidents of the Parents' Associations on September 2007 (baseline) and on June 2008 (first follow up) in treatment and Control schools.

(1) Gender of the President of the Parents' Association (%)

	Treatment	Control
Male	52.5	41.1
Female	46.7	58.9

(2) Education of the President of the Parents' Association (%)

	Treatment		Control	
	Freq	%	Freq	%
None education	9	7.4	10	8.5
Elementary	88	72.7	79	67.0
High School	19	15.7	22	18.6
Seniors' High School	3	2.5	6	5.1
University	1	0.8	1	0.9
Note: Freq=Frequency				

3) Parents' level of participation

Indicate how the level of parental participation was in general school matters during this school year (%).

	Treatment		Control	
	Freq	%	Freq	%
Low	6	5.0	7	5.7
Medium	54	45.4	67	54.9
High	56	47.1	47	38.5
Note: Freq=Frequency; Baseline				

(4) Teachers Absenteeism

In general terms and during this school year, how would you say that the level of school attendance of teachers has been...? (%)

	Treatment		Control	
	Freq	%	Freq	%
Low	3	2.6	5	4.3
Medium	33	28.5	35	30.2
High	77	66.4	72	62.1
Note: Freq=Frequency				

(5) During the previous school year, the quantity of teaching and learning resources and materials (computers, textbooks, reading books, school utensils) increased? (%)

	Treatment		Control	
	Baseline	Follow up	Baseline	Follow up
Yes	56.5	62.8	53.7	47.9
No	30.4	25.7	38.8	34.7

(6) During the previous school year, did you as the president of the parents' association dedicate more hours to meetings with parents and teachers? (%)

	Treatment		Control	
	Baseline	Follow up	Baseline	Follow up
Yes	73.9	84.0	71.7	70.3
No	17.4	11.5	19.1	17.4

(7) During the previous school year did the coordination and communication between different school actors (parents, teachers and the principal) improve? (%)

	Treatment		Control	
	Baseline	Follow up	Baseline	Follow up
Yes	77.4	83.2	81.4	76.0
No	13.0	9.7	11.0	10.7

ANNEX 3. ENLACE results (school year 2007-08)

	Treatment	Control
ENLACE TEST RESULTS	453.5	445.7

Appendix A: Actual spending and commitments

Actuals

Description of Goods/Services	Contractor UPI & Name	Contractor Nationality	Contract Date	Contract Value (USD)
AGES 125 IMPACT EVALUATION: EDITING	349885 - Ms Abril Alicia Ibarra Castaneda	Mexican	01/15/2009	800.00
AGES 125 IMPACT EVALUATION: EDITING	349885 - Ms Abril Alicia Ibarra Castaneda	Mexican	01/15/2009	2,000.00
AGES 125 IMPACT EVALUATION: EDITING	349885 - Ms Abril Alicia Ibarra Castaneda	Mexican	01/15/2009	4,000.00
AGES 125 PROGRAM QUESTIONNAIRES	350959 - Mr Eduardo de Jesus Mendoza-Garcia	Mexican	01/26/2009	4,250.00
AGES 125 PROGRAM QUESTIONNAIRES	350959 - Mr Eduardo de Jesus Mendoza-Garcia	Mexican	01/26/2009	10,000.00
BMX1 DELIVERY SERVICES FOR OFFICE	DHL Express Mexico, SA de CV	Mexican	04/06/2009	39.53
AGES	326247 - Mr Eduardo Rodriguez Oreggia Y.Roma	Mexican	08/18/2008	6,000.00

Commitments (outstanding as of 06/04/2009)

Commitment Item	Vendor Id	Vendor Name	Outstanding Commitment	PO #
Short Term Consultnt	0000488314	Ms Abril Alicia Ibarra Castaneda	4,000.00	0007725928
Short Term Consultnt	0000488437	Mr Eduardo de Jesus Mendoza-Garcia	3,000.00	0007726431
Short Term Consultnt	0000467940	Mr Eduardo Rodriguez Oreggia Y.Roma	6,000.00	0007717995

Actuals	\$22,171
Commitments	\$13,000
Total	\$35,171

References

- Caldwell, B.J. 2005. *School-based Management*. Education Policy Series. The International Institute for Educational Planning and The International Academy of Education. Paris and Brussels.
- Di Gropello, E. 2006. "A Comparative Analysis of School-Based Management in Central America." World Bank Working Paper No. 72. Washington D.C.
- Di Gropello, E. and J.H. Marshall. 2005. "Teacher Effort and Schooling Outcomes in Rural Honduras," in E. Vegas, ed., *Incentives to Improve Teaching*. Washington, D.C.: The World Bank.
- Drury, D. and D. Levin. 1994. "School-based Management: The Changing Locus of Control in American Public Education." Prepared for the Office of Educational Research Office of Research, US Department of Education, Washington D.C.
- Gertler, P., H.A. Patrinos and M. Rubio-Codina. 2006. "Empowering Parents to Improve Education: Evidence from Rural Mexico." World Bank Policy Research Working Paper 3935.
- Hess, A. 1999. "Understanding Achievement (and Other) Changes under Chicago School Reform." *Educational Evaluation and Policy Analysis* 21(1): 67-83.
- Jimenez, E. and Y. Sawada. 2003. "Does community management help keep kids in schools? Evidence using panel data from El Salvador's EDUCO program." *CIRJE Discussion Paper*.
- Jimenez, E. and Y. Sawada. 1999. "Do Community-managed Schools Work? An Evaluation of El Salvador's EDUCO Program." *World Bank Economic Review*. 13(3): 415-41.
- Karim, S., C.A. Santizo Rodall and E.C. Mendoza. 2004. *Transparency in Education*. International Institute for Educational Planning and International Academy of Education. UNESCO, Paris and Brussels.
- King, E.M. and B. Özler. 1998. "What's Decentralization Got To Do With Learning? The Case of Nicaragua's School Autonomy Reform." Development Research Group, World Bank.
- King, E.M., B. Özler and L.B. Rawlings. 1999. "Nicaragua's School Autonomy Reform: Fact or Fiction?" World Bank Working Paper Series on Impact Evaluation of Education Reforms 19.
- Lopez-Calva, L. F. and L. D. Espinosa. 2006. "Efectos diferenciales de los programas compensatorios del CONAFE en el aprovechamiento escolar," in *Efectos del Impulso a la Participación de los Padres de Familia en la Escuela*, CONAFE, México.
- Murnane, R. J., J. B. Willet, and S. Cardenas. 2006. "Did Participation of Schools in Programa Escuelas de Calidad (PEC) Influence Student Outcomes?" Working Paper, Harvard University Graduate School of Education, Cambridge, MA.
- Ozler, B. 2001. "Decentralization and Student Achievement: The case of Nicaragua's School Autonomy Reform." Working Paper on Impact Evaluation of Education Reforms. Washington, DC: World Bank.
- Patrinos, H. and R. Kagia 2007. "Maximizing the Performance of Education Systems: The Case of Teacher Absenteeism" in J.E. Campos and S. Pradhan (eds.), *The Many Faces of Corruption – Tracking Vulnerabilities at the Sector Level*. World Bank, Washington D.C.

- Shapiro, J. and J. Moreno. 2006. "Compensatory education for disadvantaged Mexican students: an impact evaluation using propensity score matching." World Bank.
- Skoufias, E., and J. Shapiro. 2006. "The Pitfalls of Evaluating a School Grants Program Using Non-experimental Data." World Bank Policy Research Working Paper No. 4036.
- World Bank. 2008a. *What is School-Based Management*. Washington DC: World Bank.
- World Bank. 2008b. *What do We Know about School-Based Management*. Washington DC: World Bank.