

## Meeting EFA: Guatemala PRONADE

### Introduction

In the late 1990s and early 2000s the Guatemalan education system was failing. More than six million adults—those age 15 and higher—were illiterate with an annual increase of approximately 83,000 according to Fernando Rubio. The majority of this new illiterate population was made up of children who did not have access to education.

In December 1996, the Government of Guatemala and the Union Revolucionaria Nacional Guatemalteca (URNG) signed the Peace Accords, an important component of which included the transformation of the country's education system to address both social and economic inequalities as noted in Maria Elena Anderson's 2001 paper. The Accords stipulated that education should be a means to transmit Guatemalan values and knowledge so the Accords promoted integration of multicultural values into the educational curriculum.

Anderson also mentions the restructuring of the education system, called for in the Accords, included a 50 percent increase in the education budget relative to 2005 as a percentage of GDP, at least three years of primary schooling to all 7-12 year olds, and an increase in literacy to 70 percent by 2000. The focus of the restructuring effort in education was to deconcentrate, decentralize, and simplify educational administration. During the restructuring process, 200 positions were eliminated and nearly 400 administrative staff was laid off, 124 of which were reassigned—some to schools.

Primary education in Guatemala is geared towards children aged 7-12, and to the government's credit, concerted efforts to reach targets set under the Peace Accords, have helped increase enrollment in primary education by approximately 26 percent from 1996 to 2000—half of this increase was a result of enrollment in Guatemala's Programa Nacional de Autogestión para el Desarrollo Educativo (PRONADE) program.

In 1992, prior to the Accords, the government of Guatemala through the Ministry of Education (MINEDUC) had already begun to focus efforts on increasing access to education in remote areas. By 1994, the government had developed and implemented PRONADE, whose purpose was to collect information on rural populations, provide access to approximately 250,000 additional children not being reached by the education system, and form parent-community committees. In 1996, as part of the restructuring process, the government reoriented the role of PRONADE to focus solely on increased access to and quality of education. A formal legal mandate was established with the government under the law 24-97, placing PRONADE under the arm of MINEDUC. Today, the mission of PRONADE is to assist the Ministry of Education to increase access to and quality of education in rural areas by providing financial resources to organized communities. PRONADE seeks to create a more participatory form of



education that is responsible to local needs, including the socio-cultural and linguistic necessities of rural communities.

PRONADE schools are government charter, or self-run (i.e., autogestión), schools while traditional government schools are founded by the state. Teachers in the traditional government schools are paid by the state directly, while in PRONADE schools, Comites Educativos (COEDUCAs) hire, fire, and pay teachers with government funding. Both sets of government schools also have parent associations that manage funds for materials, food, and administration.

PRONADE schools are located primarily in rural, indigenous communities. COEDUCAs from these communities receive funding directly from the Ministry of Education to administrate the schools. Four criteria provide the basis for the establishment of a PRONADE school:

1. The community must locate a site and demonstrate the ability and interest in managing a school. Communities must be able to form COEDUCAs to serve as the local management and decision-making authority for their schools.
2. The community must be located at least three kilometers from the nearest government school, thus targeting hard-to-reach communities.
3. The community must have at least 25 primary-aged students ready to enter school.
4. The community must not have any teachers already on government payroll.

PRONADE is implemented in three stages: community identification; organization and legalization of the COEDUCA and establishment of a Board of Directors; and follow-up services such as training. The approximate time to establish the COEDUCA, obtain legal status, and complete training is three to five months.

The funding from the Ministry of Education covers teacher salaries, learning materials, and school snacks. Financing for PRONADE schools is contingent on demonstrated community participation in school management including, but not limited to, hiring teachers, setting the school calendar, and establishing a parent-run school committee.

Over the past decade, PRONADE has evolved from a small pilot program reaching 19 communities in Chimaltenango to a nationwide program that now engages more than 4,631 PRONADE schools and more than 445,000 pre-primary and primary age children as shown by the World Bank and MINEDUC. According to Di Gropello's 2005 research for the World Bank, PRONADE is one of the most proactive managerial, administrative, and financially decentralized activities undertaken in Latin America. The program has empowered isolated rural communities to administer and manage schools, and the number of hard to reach children who now have access to education has more than tripled. This case study examines the impact of PRONADE community schools in Guatemala from 1996 to 2005.

## Impact of Community Schools: Access

Access to primary education in Guatemala has expanded rapidly since 1985. Gross enrollment rates (GER) have risen from 77.9 percent in 1990 to more than 106 percent in 2002. Net enrollment rates for primary education have matched increases in the GER, rising from 64 percent in 1990 to 87.3 percent in 2002 and 89 percent in 2003. As noted above, between 1996 and 2000 the net enrollment rate increased by 26 percent, half of which can be attributed to PRONADE.

The number of students enrolled in PRONADE schools has risen dramatically since 1996 when the program began with approximately 27,730 students. By the year 2000, that number had risen to 294,041 students. In 2005, initial enrollment estimates place 455,185 students in PRONADE schools. Students enrolled in the PRONADE schools accounted for approximately 15 percent of the primary enrollment nationwide in 2005 according to the World Bank.

The number of schools and teachers under the PRONADE system has also significantly expanded. According to MINEDUC, by 2006 there were more than 4,600 PRONADE schools, approximately 11,545 primary level teachers, 2,284 pre-primary level teachers, and more than 445,000 students compared to 477 schools, 564 teachers, and 27,730 students in 1996. The following table shows PRONADE's coverage from 1996 to 2005.

**PRONADE Coverage**

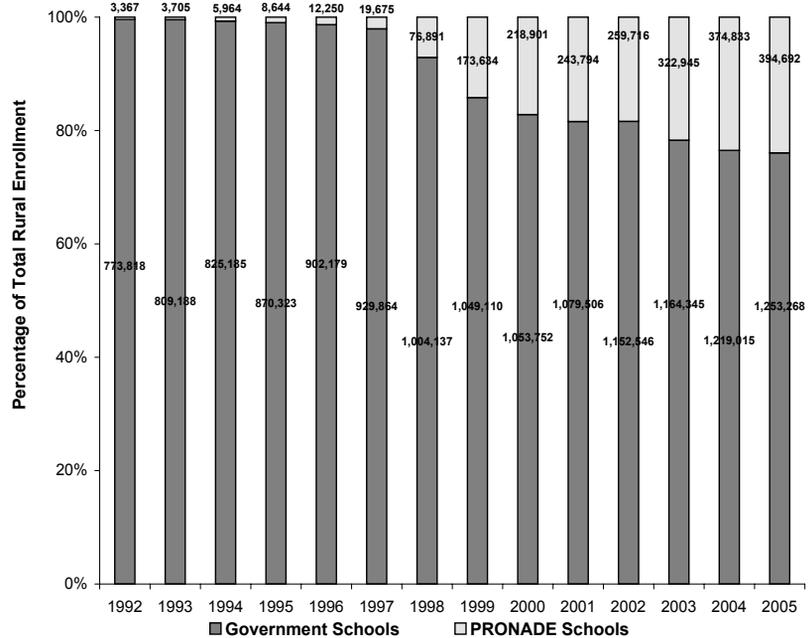
Year	Schools	Students	Teachers	Joint Directors	Instituciones de Servicios Educativos
1996	477	27,730	564	N/A	N/A
1997	900	64,161	1,095	N/A	N/A
1998	2,117	124,240	3,011	N/A	N/A
1999	2,815	221,739	6,777	2,815	24
2000	3,437	294,041	9,300	3,437	16
2001	3,423	310,119	10,091	3,423	17
2002	3,419	321,629	10,560	3,419	19
2003	4,162	386,038	12,644	4,114	26
2004	4,555	445,003	14,579	4,555	20
2005	4,633	455,185	14,955	4,633	N/A

The PRONADE community schools contribute to increased access to education in Guatemala, by addressing the major constraints to access. These restrictions include the distance students have to travel, the economic roles children play in their families, and the perceived relative value of formal education. The figure below illustrates the rapid growth of PRONADE schools in rural areas. Access to education remains more difficult for girls, as there were approximately 5 percent more boys enrolled in primary education than girls in 2003. This number was higher in rural regions. In fact, for every 100 girls



that enroll in the Guatemalan education system, only 27 make it to Grade 6. According to 2002 studies by GEMS and WID Tech, Guatemala’s access issues tend to be similar to those other countries; parents will not allow girls to walk or travel as far to school, girls are needed to help tend to the family, and girls are far more affected by cultural beliefs about the value and appropriateness of education.

**Rural Enrollment: PRONADE and Traditional Government Schools, 1997-2005.**



### Impact of Community Schools: Completion

While the Guatemalan government has improved access to school, persistence in and completion of primary school remain pressing concerns. In 2002, for every 100 school-age children eligible to enroll in primary education, 90 students enrolled in Grade 1; 49 completed Grade 3; and 37 were promoted to Grade 6. Of the original 100 students who were eligible to enroll, only 15 will make it to secondary school and of those 15, 10 will complete secondary education. In terms of urban and rural enrollment, for every 100 students, 70 students complete Grade 3 in urban schools compared to 47 in rural regions while 62 students complete Grade 6 in urban areas compared to 29 in rural schools.

The number of years that students are behind grade-appropriate age levels is one of the major challenges faced by education in Guatemala. On average, students in Guatemala start Grade 1 at age 7.9—more than a full year behind the grade-appropriate age. By Grade 3, students are on average 2 years behind the grade appropriate age and about 0.8 years behind Grade 6 age appropriate enrollment. However, MINEDUC indicated in 2007 that this age gap is limited because the students who are repeating—and hence aging—have increasingly dropped from the formal education system by Grade 6. It is important to note that as the quality of education has generally improved over the past

six years, the gap has decreased from 0.98 to 0.80 in Grade 1 and from 0.82 to 0.73 in Grade 6. The table below illustrates these age differences.

### Average Age by grade in primary and years behind appropriate grade age

Year	Average Age Per Grade					
	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6
2000	7.98	9.29	10.27	11.15	11.98	12.82
Years above age appropriate for grade	0.98	1.29	2.27	1.15	0.98	0.82
<b>2001</b>	<b>7.93</b>	<b>9.21</b>	<b>10.25</b>	<b>11.15</b>	<b>11.99</b>	<b>12.82</b>
<b>Years above age appropriate for grade</b>	<b>0.93</b>	<b>1.21</b>	<b>2.25</b>	<b>1.15</b>	<b>0.99</b>	<b>0.82</b>
2002	7.91	9.17	10.22	11.18	12.03	12.85
Years above age appropriate for grade	0.91	1.17	2.22	1.18	1.03	0.85
<b>2003</b>	<b>7.91</b>	<b>9.17</b>	<b>10.21</b>	<b>11.18</b>	<b>12.09</b>	<b>12.93</b>
<b>Years above age appropriate for grade</b>	<b>0.91</b>	<b>1.17</b>	<b>2.21</b>	<b>1.18</b>	<b>1.09</b>	<b>0.93</b>
2004	7.89	9.12	10.18	11.14	12.05	12.94
Years above age appropriate for grade	0.89	1.12	2.18	1.14	1.05	0.94
<b>2005</b>	<b>7.80</b>	<b>9.05</b>	<b>10.09</b>	<b>11.05</b>	<b>11.92</b>	<b>12.73</b>
<b>Years above age appropriate for grade</b>	<b>0.80</b>	<b>1.05</b>	<b>2.09</b>	<b>1.05</b>	<b>0.92</b>	<b>0.73</b>

According to available information, drop out is generally not an issue in PRONADE schools. Student attendance is high and, once enrolled, students persist with impressive levels of commitment and enthusiasm, though some reports from MINEDUC indicate that repetition may be an issue. A longitudinal study, conducted from 1999–2001 and published in 2002 by DP Tecnología, showed that in a sample of 281 PRONADE schools approximately 61 percent of boys and 52 percent of girls reach Grade 3 compared to the national average of 40 percent. By 2005, completion rates in PRONADE had risen to approximately 67 percent, where completion rate is calculated as the total number of completers divided by the total number of students enrolled.

Teachers and parents contribute to the high persistence rates in PRONADE schools. Teachers are hired locally and are required to check on students not in attendance. Involvement of parents on the local school boards further contributes to ensuring that students are present in school and are completing grade levels. On average, PRONADE students are in school 180 days per school year compared to 125 days in the government schools.



## Costs and Cost-Effectiveness of Community Schools

The cost of PRONADE was examined from various perspectives. First, the analysis looked at the costs to run such a program and the sources of funding for PRONADE. The cost of PRONADE was examined from various perspectives. First, the analysis looked at the costs to run such a program and the sources of funding for PRONADE. Then, within that total cost, the analysis examined the cost structure and the major program operating costs. It also calculated the cost per student enrolled. In addition to examining the input costs, the cost effectiveness of the program compared to the public education system was examined. Cost-effectiveness was measured in terms of the cost to support a student through completion of the program.

### Funding of the PRONADE Program

Sources of Funding: PRONADE	2004	2005
Government Funds	\$60,222,851	\$63,858,327
<i>KfW</i>	\$2,717,913	\$3,974,274
World Bank	\$3,580,942	\$1,829,571
Total	\$66,521,708	\$69,662,173

The costs of the PRONADE program are distributed among MINEDUC, the World Bank, and KfW. While the amount of World Bank funding decreased in 2005, both the Ministry of Education and KfW increased their support for PRONADE. According to MINEDUC, PRONADE's budget is approximately 12 percent of the overall MINEDUC budget for primary education and has increased from approximately \$54 million in 2003 to approximately \$70 million in 2005. See the table above for this year-to-year comparison and the table below for the breakdown of PRONADE costs.

### Approximate 2005 PRONADE Costs

Category	Amount in US\$	Percent of total budget
Teacher Salaries	\$49,400,000	71.0
<i>Childcare</i>	\$570,000	0.8
Teacher materials	\$380,000	0.5
<i>Student materials</i>	\$2,910,000	4.0
Food program	\$8,980,000	13.0
<i>Transportation for COEDUCAS</i>	\$60,000	0.1
Oversight of ISEs	\$3,920,000	5.6
<i>Training</i>	\$1,070,000	1.6
Medical Insurance	\$960,000	1.4
<i>Governing Body</i>	\$1,520,000	2.2
Total	\$69,700,00	100

The breakdown of the total recurrent costs for the PRONADE community schools are illustrated above—approximately \$15,500 per school. The recurrent expenditures

include teacher salaries and training, travel and transportation, materials and supplies, management oversight, and a school feeding program. As is typical in the public education system, teacher salaries comprise the majority of the recurrent budget—approximately 71% of the PRONADE budget.

PRONADE delegates three main cost categories to the local COEDUCAs for oversight—student materials, teacher materials, and the school feeding program. In 2005, the COEDUCAS paid approximately \$6 per student for materials, approximately \$28 per school for teacher materials, and approximately \$12 per school for a feeding program.

Data from the Guatemala public education system show that the recurrent budget for public education in 2003 was \$423,573,000, as shown in the table below. Approximately 80 percent–90 percent of that budget is spent on teacher salaries—slightly higher than in PRONADE.

Recurrent Costs for PRONADE and MINEDUC

	2003 Recurrent Budget per Year	Recurrent cost per student	Completion Rate	Cost per Completer
PRONADE	\$53,704,503	\$139	67%	\$1,245
<i>MINEDUC</i>	<i>\$423,573,000</i>	<i>\$162</i>	<i>62%</i>	<i>\$1,572</i>

The cost effectiveness of PRONADE can be evaluated in terms of its average cost to produce a primary school completer—a student that finishes the program. Completion rates for PRONADE students in Grades 1–6 averaged approximately 67 percent in 2005 compared to 62 percent in the government education system. Based on the unit costs presented above, the cost per completer in PRONADE is approximately \$1,245 per student compared to \$1,572 per student in the government schools. This difference stems partially from the lower per student costs, but more significantly, from the higher rate of completion in PRONADE schools.

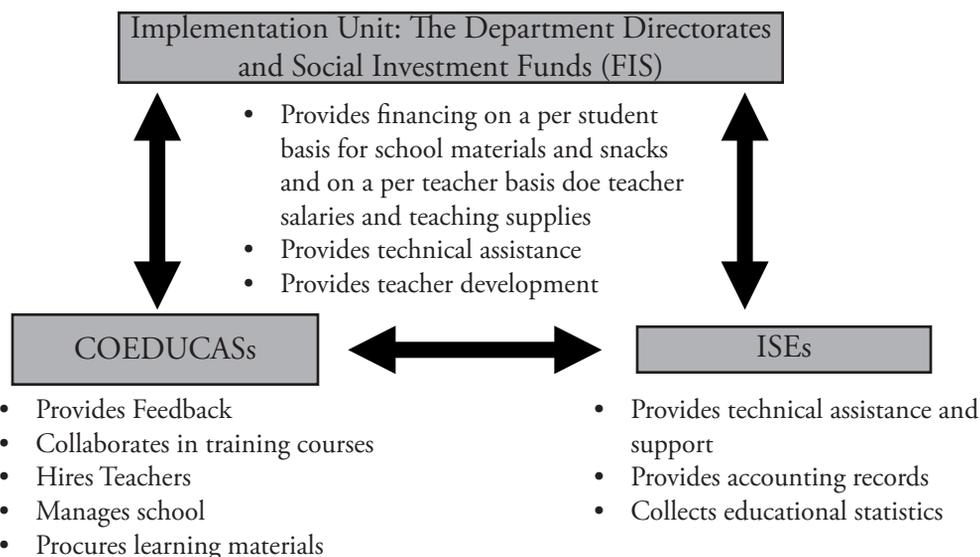
Since completion rates for PRONADE were difficult to confirm, a sensitivity analysis of various completion rates was conducted and comparisons drawn to the MINEDUC statistics. If PRONADE maintained completion rates similar to the MINEDUC system (e.g. 62 percent), the cost per completer would remain lower at approximately \$1,346 per student compared to \$1,572 per student in the MINEDUC system.



## Critical Features of PRONADE<sup>1</sup>

### Governance and Management

PRONADE is coordinated by an implementation unit that is headquartered in the Ministry of Education. MINEDUC guarantees the transfer of resources to PRONADE, oversees improvements in access and quality, hires the Instituciones de Servicios Educativos (ISEs), and presides over the PRONADE's executive committee.



The Department of Directorates and Social Investment (FIS) is responsible for strategic planning, financial management, and monitoring and evaluation of the program. Specific activities of the unit include:

- Outlining the general framework of the program;
- Determining the geographic areas that receive support;
- Signing the legal covenant with the COEDUCA;
- Identifying, selecting, contracting, and supervising the ISEs;
- Monitoring and evaluation of the program; and
- Coordinating with the Ministry of Education and other relevant departments.

The unit, consisting of 21 Direcciones Departamentales, coordinates with staff from the social investment fund on school infrastructure and liaises with other Ministry directorates on education policy and assessment. School level decisions related to administration and management are left to the COEDUCAs with support from the ISEs.

The COEDUCAs are at the core of the implementation structure of PRONADE and serve as the central administrative unit for the educational system in the community.

<sup>1</sup> Information in this section is drawn from the World Bank's 2005 "Decentralizing Education in Guatemala: School management by local communities."

As legal entities, COEDUCAs are entrusted with the administration of the program at the local level. The concept of managing the COEDUCAs through ISEs was based on previous successful interventions by NGOs such as FUNDAZUCAR and FUNDAP. These NGOs were already working at the community level and could serve as intermediaries between the PRONADE Office in MINEDUC and the schools. Staff are elected locally and usually comprise parents and community members, two of whom must be literate. The COEDUCAs receive operating funds directly from the Ministry of Education and their duties include:

- Hiring and paying teachers;
- Maintaining accounting records;
- Monitoring teacher and student attendance—a minimum 180 days in school;
- Defining the school calendar and schedule within the existing national legal framework;
- Buying and distributing school materials;
- Monitoring school libraries; and
- Organizing the school feeding programs.

The COEDUCAs are responsible for selecting, hiring, and monitoring the activities of teachers, including paying their salaries and ensuring that the teachers provide at least 180 days of class a year to students compared to 125 days in the public schools according to DP Tecnología. Teachers are rehired based on performance, which is reviewed at the end of the year by the COEDUCAs. PRONADE has been characterized by low teacher turnover, attributed mainly to the involvement of the COEDUCAs in selecting teachers and holding them responsible for the delivery of education to their children.

The ISEs are contracted by PRONADE and provide technical assistance and support at the local level. Until 2001, the ISEs provided teacher training on active learning and multigrade and multilingual pedagogies and methods. More recently, the regional ministry offices have taken over the responsibility for training teachers. Functions of the ISEs include:

- Identifying educational needs in the communities they serve;
- Organizing and assisting the COEDUCAs to gain legal status;
- Providing financial and administrative training to members of the COEDUCAs; and
- Maintaining updated information on the schools and students under their supervision.

### *Teachers and Teacher Training*

PRONADE teachers are hired by the COEDUCAs. Teachers must be licensed to occupy positions in pre-primary and primary education. For regions that are extremely rural, the COEDUCAs can hire people with the minimum certification for third grade. Teachers must present a photocopy of the most recently approved teaching license.



Administrative training on school management for teachers and parents was delivered by the ISEs until 2001. In 2001, administrative training for parents was retained by the ISEs. The administration of the school began to be carried out by COEDUCAs and quality training was moved to the Dirección de Calidad y Desarrollo Educativo (DICADE) personnel, which included active learning, multigrade school teaching, and Basic National Curriculum. Some have argued that these changes have led to a decline in the quality of the training program.

Teachers in PRONADE are expected to teach and evaluate students through active learning, report to the COEDUCAs, and receive clearance to be absent from school (e.g. for teacher training). Teachers must also research and understand community needs, coordinate the feeding program with the COEDUCAs, and assist in the management of the school along with the Director. If teachers miss more than three days of school, the COEDUCAs can replace him or her with a new teacher.

#### Percentage of Teachers Receiving Capacity Building

Pedagogical Item	PRONADE Schools				Comparison Public Schools			
	1999		2001		1999		2001	
	Freq	%	%	%	Freq	%	%	%
Use of didactic materials	228	60	56	33	45	36	19	17
<i>Math</i>	354	60	66	51	55	37	27	21
Science	261	53	55	38	29	29	13	11
<i>Spanish</i>	253	50	54	37	35	29	18	13
Assessment	194	48	54	28	44	31	23	17
<i>Social Studies</i>	220	38	52	32	23	17	10	9
Second Language Learning	128	30	25	19	29	16	13	11
<i>Education Reform</i>	94	30	22	14	38	51	23	14
Music	62	22	13	9	12	11	3	5
<i>Physical Education</i>	54	18	11	8	11	10	4	4

The DP Tecnología study conducted from 1999–2001 compared the quality of teachers in PRONADE with rural government school teachers. The objective of the study was to examine whether teachers were able to implement changes in the classroom that improved learning. Teachers were rated in their ability to speak the local language, their relationship with the community, and support they received from external sources. Approximately 689 teachers from PRONADE schools were interviewed. Approximately 264 teachers from the comparison government schools were interviewed, of which 49 percent were men and 50 percent were women.

In terms of capacity building for teachers, 33 percent of the study sample indicated that they had received training on the use of didactic items compared to 17 percent in the government schools in 2001. The percentage of teachers receiving subject

specific training in Math, Science, and Spanish was 51, 38, and 37 percent respectively compared to 21, 11 and 13 percent for government schools in the same year. These findings reveal that while PRONADE teachers seem to receive more capacity building, on average fewer than half of the teachers sampled attended training. Moreover, as the table above demonstrates, the percentage of teachers receiving capacity building in these pedagogical areas has consistently decreased since 1999.

In terms of the impact that training had on teachers' classroom performance, the 2002 study found no significant differences between the teaching styles of PRONADE and government school teachers, although mention is made that PRONADE teachers have a tendency to integrate more active learning activities into their teaching. In general, both sets of teachers tended toward teacher-centered pedagogy. The study indicates that the failure to see changes in teaching styles, particularly among PRONADE teachers, is traced to the declining amount and quality of teacher training.

In 1999 74 percent of the PRONADE teaching sample was observed to transmit information in a clear manner. By 2001, the percentage had dropped to 62 percent. The government schools experience similar declines falling from 77 percent in 1999 to 58 percent in 2001. Declines were also seen in teachers' abilities to transmit language in a comprehensible manner—from 62 percent to 41 percent—and in teachers' abilities to use positive reinforcement—61 percent to 41 percent. The following table further synthesizes the results of teachers' classroom impact.

While all of the areas above experienced declines of 15–20 percentage points, teachers in PRONADE experienced the greatest decline in their ability to transmit information in an understandable language and in their ability to transmit information in a clear manner. It is uncertain what caused the decline in the communicative aspects of teaching in these sample schools. By 2001, these indicators had started to rise once again, but had not returned to their initial baseline levels. It should be noted that teachers in both models acted similarly in the classroom in these areas.

The decline in impact was also seen among supervisors and the *Instituciones de Servicios Educativos* (ISE) technicians. The results for this group paralleled those observed by the researchers. Supervisors were less able to transmit information clearly, use different techniques to communicate materials, and transmit information in an organized manner. This decline may be associated with the rotation and replacement of supervisors with less experienced staff or with the rotation of ISEs. In both cases, the longitudinal study was unable to establish a conclusive cause for the declines.

In previous years, teacher training for PRONADE staff had been the responsibility of the ISEs. PRONADE teachers would receive the equivalent of three to five weeks of training per year, which was focused on both content and methods. In 2001, teacher training was transferred back to MINEDUC through the Direcciones Departamentales and PRONADE teachers only received three days of training. A follow-up study on the impact of this change is needed to determine the impact on the quality of teaching.

### Frequency of Teachers' Classroom Behavior

Pedagogical Item	PRONADE Schools				Comparison Public Schools				
	1999	2000	2001	1999	2000	2001	1999	2000	2001
	Freq	%	%	%	Freq	%	%	%	%
Transmits information in a clear manner	213	74	49	62	70	77	52	58	58
<i>Transmits language in a comprehensible language</i>	143	62	35	41	56	63	33	47	47
Uses more positive reinforcement than negative	167	61	41	48	55	58	37	46	46
<i>Transmits information in an organized manner.</i>	140	59	32	41	55	71	33	46	46
Tasks are clearly defined	130	53	30	38	54	54	32	45	45
<i>Tasks are related to their objectives</i>	126	52	31	36	48	57	28	40	40
Tells students clearly what is expected of them.	125	51	31	36	53	55	29	44	44

### Teaching Multiple Grades

The number of grades taught by one teacher often impacts the quality of instruction in the classroom, and in PRONADE there are no established criteria for determining which teachers are assigned multi-grade classes or whether they have the skill sets to effectively teach the grade(s) to which they are assigned. DP Tecnología's 2002 longitudinal study examined the number of teachers responsible for multi-grade classrooms. Results showed that between 1999 and 2000, there was a 5 percent increase, from 24 to 29 percent, in the number of teachers responsible for one grade in the sample schools. However, 71% of PRONADE teachers are still teaching multi-grade classes. In the 281 sample PRONADE schools included in the study, 28 percent of teachers are responsible for two grades, 29 percent for one grade and 19 percent for three grades. In the government schools, the distribution is similar—29 percent are responsible for one grade, 30 percent for two grades, and 21 percent for three grades. The percentages remained relatively unchanged from 1999-2001.

### Curriculum and Instructional Time

The longitudinal study also compared the percentage of schools offering complete instructional days. The study found that in 1999, students in 67 percent of PRONADE schools received a full, five hour instructional day. A year later, the percentage had risen to 88 percent and to 90 percent in 2001—a 23 percent increase in the number of PRONADE schools offering a complete day of instruction. The government schools also showed an increase in the percentage of schools offering a complete day of instruction—from 63 percent in 1999 to 70 percent in 2001. However, the percentage of government schools offering a complete instructional day remained lower than PRONADE.

It is important to note that instructional time refers to the amount of time that the teacher and students are engaged in teaching and learning activities. Instructional time between PRONADE and the government schools was also compared in the longitudinal

study. In 2001, 87 percent of PRONADE schools were providing at least 4 hours and fifteen minutes of classroom instruction—an increase of more than 20 percent from 1999. By the same measure, the government schools were found to have much lower efficiency—approximately 58 percent in 2001.

The longitudinal study also examined classroom practices in the sample schools. The study found that teachers in both PRONADE and the government schools used the small group technique more than any other method—80 percent and 75 percent respectively in 2001. Other techniques used in classrooms to help students learn included: time on task—65 percent in PRONADE schools compared to 64 percent in government schools in 2001—and cooperative learning—52 percent compared to 42 percent in 2001 respectively. When teachers were asked to explain why they used these various classroom techniques, the teachers indicated that the combination of pedagogical practices subjected students to a process of self-learning and self-control. The reflective, self-learning approach contributes to a higher level of learning and a greater ability to reach learning objectives according to the longitudinal study.

While PRONADE has made strides in improving teachers' pedagogical practices, both PRONADE and government school teachers overwhelmingly continue to practice traditional teaching methods in the classroom. Because PRONADE has almost met its access goals, a greater emphasis on quality of instruction will be critical to ensuring students succeed. The Ministry of Education and PRONADE staff need to clearly define the concepts teachers are expected to teach and ensure that training and direct instructional support are provided to ensure proper implementation of the pedagogical concepts in classrooms.

### *Use of Materials and Language of Instruction*

During the longitudinal study, researchers also observed the use of instructional materials in the classroom of both PRONADE and the government schools. The results showed that across the board, the majority of teachers in both educational systems failed to use instructional materials—approximately 84 percent of PRONADE schools did not use books or instructional guides compared to 85 percent in the government schools.

In terms of language of instruction, the percentage of bilingual teachers increased significantly in both the PRONADE and the government schools—93 percent of PRONADE teachers and 85 percent of government school teachers are bilingual. Moreover, the study demonstrated that both groups experienced a reduction in the use of Spanish-only language instruction. By 2001, 40 percent of PRONADE teachers were using only Spanish compared to 48 percent of teachers in the government school system. According to DP Tecnología, 9 percent of PRONADE teachers used a Mayan language exclusively compared to 13 percent in the government schools. International research on bilingual education indicates that use of mother tongue instruction in the early years of education assists students in learning foundational literacy and numeracy skills, hence contributing to improved school performance. This study asserts that the use of bilingual education contributed to improved student learning in the PRONADE



schools, although further research is needed to actually measure those gains and attribute them directly to mother tongue instruction.

### *Role of the COEDUCAs*

Community and parental involvement in the education of their children is a critical element to the effectiveness of the PRONADE program. The COEDUCAs became central to the process of serving as an intermediary between the Central Ministry and local communities.

For the purposes of the longitudinal study, 685 members of COEDUCAs and 204 Directors of the comparison schools were interviewed. Results of the interview process showed a decline in the amount of capacity building and training that both Directors and parents in the PRONADE schools received. In 2001, the COEDUCAs received only five days of capacity building, compared to 10 in 1999 as noted in DP Tecnología's study. The decline in capacity building contributed to a decline in members' understanding of their role and responsibilities, vis-à-vis the role of the COEDUCAs. The decline in understanding about their roles and responsibilities impacted members' abilities to oversee teacher roles and provide the necessary support to ensure effective learning in the classroom.

Interestingly, while the COEDUCAs seem to have lessened their engagement, parents increased their support to the PRONADE schools, which demonstrated the confidence the parents had in collaborating with the COEDUCAs. In fact, DP Tecnología found that on the day observations were conducted there was at least one parent actively engaged in the classroom in 62.9% of PRONADE schools. The benefits of the increased parental involvement need to be recognized and further developed by the PRONADE schools.

### *The Policy and Institutional Context*

The policy and enabling environment play a critical role in the development and implementation of complementary models such as the PRONADE program. In the case of Guatemala, the government, MINEDUC in Guatemala's case, played a critical role in both establishing and supporting PRONADE. The concept of PRONADE arose from various experiences both within and external to Guatemala. Internally, MINEDUC had already been experimenting with two alternative programs: Refugiados—targeted at the Mayan refugee population—and the Institutos por Cooperativas. The communities of Refugiados were hiring their own facilitators, called promotores educativos, which had been authorized under the Peace Accords. Today, there are more than 1,200 teachers who began as promotores, hired and paid by the communities under the Refugiados program. These teachers were not selected through the regular teacher selection process, but were given a regular teaching post. The practice set the precedent for allowing communities to select their own teachers under PRONADE.

The Institutos por Cooperativas were geared towards middle schools that had been working since the 1970s. These Institutos were created in municipalities by parents and the MINEDUC, and were funded in equal parts by community and MINEDUC

contributions. The practice of shared funding for community-based education in Guatemala was thus borne in the 1970s. The EDUCO program in El Salvador also contributed ideas to the design of PRONADE.

The development of PRONADE was triggered mainly by on-going administrative challenges in the regular education system including the lack of native or bilingual teachers to teach in non-Spanish speaking communities, the lag time to assign a teacher in the government system—which can take two years—and the fact that it was difficult for MINEDUC to execute funding directly and send provisions to the schools. MINEDUC realized it needed a system that allowed for decentralized local control of funding and hiring teachers.

In 1994, almost eight years after the signing of the Peace Accords, MINEDUC established PRONADE as a legal entity under Law 24-97, Article 33 of the Constitution. The objective was to increase access, improve the quality of education in rural areas, and increase participation of rural communities in the education process. These objectives coincide with the mandate of the Peace Accords to increase civic participation and democracy in Guatemala. MINEDUC ensured that PRONADE was a legal entity and worked with the Ministry of Public Finance to allocate resources to support the program each year. MINEDUC was the driving force in the establishment of PRONADE.

Placing trust in the communities was paramount in the process of establishing PRONADE. Based on the previous experience of Refugiados, Institutos por Cooperativas, and NGOs such as FUNDAZUCAR and FUNDAP, MINEDUC believed that parents would do a better job managing the resources intended for the education of their children. The Ministry of Education also thought that officials at the central, more bureaucratic level would potentially hinder the process, based on the administrative challenges previously discussed.

A financial trust was established to administer resources to the COEDUCAs and ISEs. The COEDUCAs did not have to manage themselves through the regular government procedures to purchase items or hire staff. Since they were given their own administrative structure, the COEDUCAs were better able to execute the management of resources, though it did require more training. Consistent with the government's agreement to establish PRONADE as a legal entity, the Ministry of Public Finance agreed to allocate sufficient resources to the trust each year to ensure implementation of the program. As noted in the World Bank's 2005 article, "Decentralizing Education in Guatemala: School management by local communities," funds are dispersed every three months to a local bank, based on expenditures submitted by the COEDUCAs and PRONADE. The ISEs provide substantive input in developing the budget and ensuring that funds are spent correctly and in accordance with allocated categories of expenditures. PRONADE and the ISEs' financial units are responsible for supervising the process, with the support of MINEDUC.



The process of delegating management authority to the community level has been highly successful, with more than 4,600 PRONADE schools now managing their own resources. More importantly, the success of PRONADE led MINEDUC to decentralize resource management to all government schools that are now working with a similar system. While the government schools cannot hire their own teachers, the schools are able to develop Juntas Escolares—similar to the COEDUCAs. Today, more than 10,000 schools in Guatemala have their own Juntas Escolares and are working in a decentralized manner, executing a budget for all support services including teachers’ materials, school supplies, and school lunches.

### Conclusions and Limitations of PRONADE

PRONADE has become the main strategy for increasing basic education coverage in rural Guatemala, with particular success in terms of increasing access and completion. Today, the program serves between 15% and 20% of pre-primary and primary school students and does so in a cost-effective way.

However, PRONADE is also a controversial program because according to the Programa Nacional de Evaluación del Rendimiento Escolar (PRONERE), it has reduced the role of the government and transferred responsibilities and costs to the rural population. To some, PRONADE has created a parallel system of education, rather than one that supports and integrates with the existing system. Opponents of the program argue the following points:

- The State’s reduced role in delivering education impacts quality since decision making is reduced to regulatory and delegatory issues.
- A 2000 report by PRONERE indicated that the poorest performing schools were those from the Directorate of Bilingual Education and PRONADE. Opponents attribute the poor performance to the fact that PRONADE teachers have not been fully trained, are teaching assistants, or have other non-traditional qualifications (i.e. have not attended or graduated from Teacher Training Colleges). However, PRONADE schools are located in the areas with the poorest access to education. These factors play a role in the results of evaluations as well as in the quality of schools.
- While communities should take an active role in management and decision making at the school level, they are in reality relegated to administrative functions.
- Self-management is still absent at the more numerous traditional government schools
- Bilingual teachers lack pedagogical education in bilingualism.
- The training of teachers is the responsibility of the Ministry of Education, is centralized, and does not necessarily respond to the requirements of the schools controlled by the community. This problem is confirmed in the 2002 DP Tecnología evaluation that found that the quality of teachers had declined since the ISEs ceased to provide teacher training and the function was transferred back to MINEDUC.

Proponents, including the World Bank, acknowledge many of these issues but viewed them as challenges along the development path. Proponents also feel that the failure

to fully institutionalize PRONADE into the MINEDUC system contributed to the perception that it is a parallel, rather than complementary system.

Data presented in the previous section of this case study indicates that PRONADE is a cost-effective way to educate children in underserved communities. The program has increased Guatemala's enrollment rates by 15-20%, bringing the country closer to its EFA targets; produced higher completion rates; and led to PRONADE students performing equal to or better than other rural schools in math and better in reading according to a 2004 World Bank Notes report..

PRONADE also effectively creates an opportunity to learn for its students. An opportunity to learn, according to Porter's 1993 paper, refers to the creation of equitable conditions or circumstances within the school or classroom that promote learning for all students. The term also refers to the absence of barriers that prevent learning as noted in Mereku, et. al's 2005 study. While the views about what creates an opportunity to learn differ, Ysseldyke, et. al. define it as the basis for assessing the sufficiency or quality of the resources, practices, and conditions necessary at each level of the education system to provide all students with the opportunity to learn the national curriculum. Current research conducted by Gillies and Quijada in 2007 indicates that schools can provide an opportunity to learn by meeting the following core elements:

- A minimal instructional time of 850-1000 hours per year. PRONADE ensures 180 days of instruction annually—approximately 850 hours.
- The school is open every day of the school year, and the school is located in the village or at least within 1 km of the student. PRONADE schools are open in local communities that have a minimum of 25 students ready to attend school.
- The teacher is in the school every day of the school year. COEDUCAs ensure the teacher's presence.
- The student is in the school every day of the school year. COEDUCA's and parents in PRONADE ensure the students are in school. If absent, teachers follow-up with the family.
- The student-teacher ratio is within manageable limits, assumed to be at least below 50-1.
- Instructional materials are available for all students and used daily. PRONADE ensures students and teachers have materials.
- The school day is organized to maximize time on task.

PRONADE has improved access and quality in education for a significant number of children in Guatemala. In the coming years, the program will be challenged to continue assisting the public school system in reaching hard-to-reach populations, while reducing repetition, improving training for teachers and the COEDUCAs, and ensuring continued efforts at better understanding the impact of PRONADE on education—particularly completion rates and achievement—through impact evaluations and studies.



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### For more information about EQUIP2, please contact:

#### USAID

##### Patrick Collins

CTO EGAT/ED  
USAID Washington  
1300 Pennsylvania Ave., NW  
Washington, DC 20532  
Tel: 202-712-4151  
Email: [pcollins@usaid.gov](mailto:pcollins@usaid.gov)

#### FHI 360

##### John Gillies

EQUIP2 Project Director  
1825 Connecticut Ave., NW  
Washington, DC 20009  
Tel: 202-884-8256  
Email: [equip2@fhi360.org](mailto:equip2@fhi360.org)  
Web: [www.equip123.net](http://www.equip123.net)

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