Chapter 5

Educational Effects of the Compensatory Programs in Mexico[1]

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Summary

The results of Mexico's programs for basic education improvement are analyzed in detail. This country has attained almost 100% enrolment at the national level, but there are poor areas where many children are found out of school. There are a lot of repeaters in schools, the majority of whom failed in the promotion examination. There are two types of programs: scholarship programs which aim at promoting enrolment and advancement of poor children in schools and school improvement programs which are designed to reduce failing scores in promotion examinations through improvement of the quality of education. They are expected to contribute to an increase in the number of children who complete primary and lower secondary education. Since 1991 the programs have been expanded through loans from the World Bank and American Development Bank. The authors scrutinize and synthesize the programs' effects with various data and previous studies on the theme and conclude that the programs have contributed to an increase in the number of students in school and improved attendance ratios and promotion ratios, but improvement in the quality of education can not be confirmed. They also found that indigenous schools were behind rural ordinary schools in terms of children's academic achievement, and that the disparity was growing.

Key Words

Mexico, education, compensatory program, PROGRESA, OPORTUNIDADES

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I.- DISTRIBUTION OF EDUCATIONAL OPPORTUNITIES IN MEXICO

Since 1981, primary school enrollment in Mexico has been approximately equal to the number of children and adolescents between the ages of six and fourteen, in accordance to the Law. However, the data provided by the Mexican Institute for Educational Evaluation indicate that 24% of those children and adolescents enrolled are registered in lower grades than those corresponding to their ages[2]. As a consequence of this problem, the opportunities to receive compulsory education are not being equally distributed in Mexico. As a matter of fact, distribution of such opportunities strongly depends on students´ socioeconomic status, as well as on regional levels of socioeconomic development.

As examples of the inequalities arising from this situation, we prepared the next chart, showing the values of eight indicators:

Table 1. Indicators of educational inequalities in the most and least developed state in Mexico

Indicators	**Most developed state (*)**	**Least developed state (**)**
Population 25-29 years old which is illiterate (2000)	1.0%	16.1%
Population 25-29 years old which did not finish elementary education (2000)	3.6%	24.2%
Population 25-29 years old which did not finish basic education (in 2000)	14.4%	25.8%
Probability of finishing elementary school in 6 years (2004)	0.90	0.56
13-year olds finishing 6th grade (2004)	87.3%	54.0%
16-year olds finishing 9th grade (2004)	74.0%	34.9%
Students receiving high test scores in reading (2004)	34.0%	14.5%
Students receiving high test scores in reading (2004)	8.1%	2.9%

(*) Federal District; (**) State of Chiapas

Source: Data obtained from INEE, Indicadores Educativos, 2004

[2] Cf. Instituto Nacional par la Evaluación de la Educación, *La Calidad de la Educación en México*, México: 2004, chart 4.11

The first three indicators refer to the situation of Mexican residents who in 1981 were between 6 and 14 years old; therefore, in 2000 (that is, 19 years later) they were between 25 and 29 years old. The remaining five indicators refer to those children and adolescents who in 2004 were enrolled in primary and junior high schools.

i) Values of the first three indicators

- In the year 2000, the illiteracy rate corresponding to the above-mentioned demographic cohort was 1.0% in the Mexican state that has achieved the highest level of socioeconomic development, and 16.1% in the most disadvantaged state[3].

- The proportion of these demographic cohorts that did not complete their primary education represented 3.6% in the former of these states and 24.2% in the latter.

- In the former of these states, 14.4% of those demographic cohorts did not complete their basic education[4], which contrasts with the 25.8% that did not reach that goal in the latter state.

ii) Values of the Indicators referring to the students enrolled in elementary education in 2004.

- The probability of completing primary education in six years ranges from 0.56 in the most disadvantaged state to 0.90 in the most developed state[5].

- The proportion of 13-year olds who have completed 6th grade is 54.0% and 87.3%, respectively.

- The proportion of 16-year olds who have completed 9th grade is 34.9% and 74.0% in these states, respectively.

[3] The most economically developed state is the Distrito Federal, and the most disadvantaged is the state of Chiapas.
[4] In Mexico, basic (or compulsory) education ends at 9th grade
[5] In Mexico, primary (or elementary) education ends at 6th grade

Academic achievement is also clearly related to poverty. In fact, the percentage of students who in 2004 reached a high level of reading comprehension was 14.5% in the poorest state and 34.0% in the most highly developed one. In addition, the proportion of students who were high achievers in mathematics was 2.9% and 8.1%, respectively.

Thus, the need to implement programs aimed at reducing inequalities—in access to the school system and staying in school, along with having the ability to achieve academic competence—is evident. This is the reason why Mexico has implemented so many different compensatory programs, which will be discussed in the next chapters of this paper.

II. PROGRAMS IMPLEMENTED TO REDUCE EDUCATIONAL INEQUALITIES

A. Programs designed to improve quality of school inputs and processes

In 1971, the Mexican government created CONAFE (Spanish acronym for National Council for Educational Promotion), an organization aimed at improving educational opportunities for children from economically deprived areas by enabling them to enter the public primary school system. In 1983, in these same areas, CONAFE began to satisfy the demand for kindergarten classes, and in 1997 it initiated a project for secondary (in Mexico, grades 7-9) education.

Since 1992, CONAFE has also been committed to strengthening educational programs to improve the quality of primary education in these marginalized zones. To this end, it began to operate “compensatory programs,” through which it today provides diverse material, economic, educational and continuing education resources to rural, indigenous, and marginalized urban schools, which experience lagging school attendance and low achievement rates.

To improve the quality of school inputs and educational processes, CONAFE utilizes two types of components. The first deals with improving material conditions in schools and supervisory offices (installations, furniture, equipment, and materials);

the second provides training for teachers, supervisors, superintendents, and directors of the state secretaries of education.

From 1992 to 1995, the Program to Overcome the Educational Gap, or PARE (from the initials in Spanish, Programa para Abatir el Rezago Educativo), a part of these educational initiatives, operated in the states of Chiapas, Guerrero, Hidalgo, and Oaxaca, home to the poorest school attendance rates in the country.

In 1993, CONAFE began the Project for the Development of Initial Education (PRODEI), which went into effect in ten of the fourteen states that were employing compensatory actions (Chiapas, Guanajuato, Guerrero, Hidalgo, México, Michoacán, Puebla, Oaxaca, San Luis Potosí, and Veracruz).

The following year, operatives of the Program to Overcome the Educational Gap in Basic Education, PAREB (Programa para Abatir el Rezago en la Educación Básica), (PAREB) began in Campeche, Durango, Guanajuato, Jalisco, Michoacán, Puebla, San Luis Potosí, Tabasco, Veracruz, and Yucatán for the duration of five semesters (from 1994 to 1995 and from 1998 to 1999). At the time of the original program's conclusion, PARE's four states and PRODEI's ten states became part of PAREB in order to consolidate and extend their educational benefits for a longer period of time.

PAREB served as a model of methodology, experience, and, principally, results and in 1994 led to a study of the institutional feasibility of implementing a new program. Thus, in 1995, the Composite Program to Encourage School Attendance (PIARE) started in Colima, Chihuahua, Estado de México, Nayarit, Querétaro, Quintana Roo, Sinaloa, Sonora, and Zacatecas, to be joined three years later by Aguascalientes, Baja California, Baja California Sur, Coahuila, Morelos, Nuevo León, Tamaulipas, and Tlaxcala.

Finally, the Program to Encourage Pre-kindergarten and Primary School Attendance ("PAREIB") went into effect in the second semester of 1998 and for the first time included all levels of basic education through compensatory attention: non-school initial education, kindergarten, and primary and secondary education in rural and in marginalized urban communities.

Compensatory programs have evolved through the gradual incorporation of a growing number of Mexican states, beginning with the four that had the highest levels of marginalization and advancing to include all of Mexico's thirty-one states. The application of experiences obtained through previous programs to an increasing number of state initiatives has led to the generation of synergies that are necessary to optimize the results of all the programs involved.

Table 2 contains data relative to the time frames and financing of these different programs and shows the corresponding financial resources, which in 1991 totaled 352 million U.S. dollars and rose to $780 million by 1999. The Mexican government's allocations rose from $102 million to $155, and international organization contributions to the programs rose from $250 to $625 within the same time frame.

Table 2. Time frame and financial sources of compensatory programs

Program	Time Frame	Financing (Millons of U.S. dóllars)			
		World Bank	Mexican Government	Others	Total
PARE	1991-1996	250	102	-	352
PRODEI	1993-1997	80	34	1b	115
PAREB	1994-1999	412	204.7	-	616.7
PIARE	1995-2000	-	260	390 c	650
PAREIB	1998-2006	625	155	-	780

[b] UNICEF, UNESCO y PNUD

Source: Data obtained from conafe.edu.mx

Table 3 contains information about the evolution of the programs' coverage during the 1990's and shows that the students benefiting from the compensatory educational programs rose from 1.02 to 4.34 million, a figure that represents 29.4% of the total number of students registered in these educational levels.

Table 3. Students participating annually in compensatory programs

Program	1992	1993	1994	1995	1996	1997	1998	1999	2000 (goals)
PARE	1 018 671	1 204 131	1 204 131	1 204 131	1 204 131	1 225 651	1 241 884	1 385 608	1 405 006
PAREB			81 916	707 749	1 522 130	1 565 658	1 575 003	1 680 102	1 705 651
PIARE				199 102	1 009 229	1 008 380	1 012 726	1 014 515	1 030 749
PIARE 8							184 602	182 057	194 844
Total	1 018 671	1 204 131	1 286 047	2 110 982	3 735 490	3 799 689	4 014 215	4 262 282	4 336 250

Source: SEP´s Informes de Labore

B. Programs designed to reduce educational opportunity costs

Some programs designed to reduce educational opportunity costs promote the timely distribution of free textbooks; others concern themselves with distributing subsidies among poverty-stricken families. This second kind of program will be discussed below.

The first of these programs had the name “PROGRESA” (Spanish acronym for Program of Education, Health and Food). It currently goes by the name “OPORTUNIDADES,” (“Opportunities”), and its goal is to support marginalized families through diverse strategies in order to develop the ability of these families to reach higher levels of well-being by eradicating the causes of poverty in their lives. In the educational realm, the aim of this program is to support young children and youths so that they can enter school and stay there until they have completed their basic education.

Oportunidades´ coverage has become increasingly extensive. The number of families benefiting grew from 400,000 in 1997 to 4,939,400 in 2004. 72.3% of families are rural, 12.9% live in semi-urban areas, and the remaining 14.8% are from cities[6]. Due

[6] Estimates based on figures in the Statistical Annex of President Fox’s Fourth State of the Union address

to its importance, the program receives 46.5% of the Secretary of Social Development's (SEDESOL) budget to combat poverty[7].

Scholarships go to students under eighteen who are enrolled in grades 3-9. To keep their scholarships, students must attend at least 85% of their classes. Scholarships increase with grade levels, and women in secondary school receive more money as an encouragement to stay in school.

CONAFE believes that by zeroing in on families and communities in need, its services coincide approximately 85% of the time with programs aimed at strengthening educational opportunities in rural and indigenous zones, thus increasing the efficiency and effectiveness of formal education (See CONAFE: 2000).

III. OVERVIEW OF THE OUTCOMES OF THESE PROGRAMS

A. Indirect assessments -national level-

The educational results of these programs can undergo indirect evaluation through composite observations based on the following indicators, among others: a) course repetition; b) terminal efficiency and c) achievement. An analysis of the corresponding information follows.

1. Course repetition and terminal efficiency

According to CONAFE (see Tables 4 and 5), the ratio of course repetition and terminal efficiency in communities with access to compensatory programs improved more rapidly than that of the rest of the school population (Table 6). This finding is consistent with the hypothesis that the improvement in terminal efficiency in communities served was a result of the educational strategies affected by compensatory programs.

[7] Cf. Secretary's web page

Table 4. Comparison of course repetition rates observed in communities served by compensatory programs with communities lacking these programs

School year	Total	Communities served	Communities not served	Difference	Variation in communities served	Variation in communities not served
1991-1992	9.1	13.8	7.3	6.5		
1992-1993	8.7	13.2	7.0	6.2	0.6	0.3
1993-1994	7.2	10.5	6.0	4.5	2.7	1.0
1994-1995	7.0	10.2	5.8	4.4	0.3	0.2
1995-1996	6.8	10.0	5.5	4.5	0.2	0.3
1996-1997	6.9	9.6	5.9	3.7	0.4	-0.4
1997-1998	6.7	9.4	5.7	3.7	0.2	0.2
1998-1999	6.6	9.2	5.6	3.6	0.2	0.1

Table 5. Comparison of terminal efficiency levels observed in communities with access to compensatory programs with those of communities lacking them

School year	Total	Communities served	Communities not served	Difference	Variation in communities served	Variation in communities not served
1991-1992	74.9	59.9	80.7	20.8		
1992-1993	75.8	60.8	81.7	20.9	0.9	1.0
1993-1994	78.5	64.9	83.9	19.0	4.1	2.2
1994-1995	79.3	69.0	83.2	14.2	4.1	-0.7
1995-1996	80.2	71.2	83.8	12.2	2.2	0.2
1996-1997	82.8	76.8	85.2	8.4	5.6	1.8
1997-1998	84.9	79.0	87.3	8.3	2.2	2.1
1998-1999	85.8	80.8	87.8	7.0	1.8	0.5

Source: Data in charts 3 and 4 come from: CONAFE's, Memoria de la Gestión 1995-2000. México: CONAFE, 2000, pp.202 and ff.

Table 6. Improvement of the indices in each segment of the school population

Indices	Communities served	Communities not served	Total population
Improvement in the course repetition index	-4.6%	-1.7%	-2.5%
Improvement in the terminal efficiency index	+20.9%	+7.1%	+10.9%

2. Achievement

a) Persistence in the inequalities of achievement obtained in different types of schools

Mexican primary and secondary schools are grouped into different categories (called "modalities") according to their source of financing, to their socio-geographic[8] location and to their curriculum. Primary school modalities include private schools, urban public schools, rural public schools, community centers that operate in small communities and follow CONAFE's curriculum, and schools for the indigenous population, commonly called "indigenous schools."

Secondary school modalities include private schools, general schools, technical schools and televised classes. General and technical schools have distinctive curricula while televised classes, aimed mainly at rural and marginalized urban zones, employ the technology needed to offer courses.

Researchers have found that over time there is a clear statistical relationship among the different educational modalities, which by their hierarchical position correspond to the social classes that most of their students belong to. These students' grade averages often determine, in decreasing order, a school's modality.

PRIMARY SCHOOLS: 1) Private Schools; 2) Urban public schools; 3) Rural schools; 4) Community centers; 5) Indigenous schools

[8] The use of this concept indicates that the categories described have already been defined as per where the schools are located. There is, however, a clear correlation between a school's location and the social status of its students.

SECONDARY SCHOOLS: 1) Private schools; 2) General and technical schools; 3) Televised classes.

The National Institute for Educational Evaluation (INEE) has just published its second report, "The Quality of Basic Education in Mexico," which contains the results of achievement tests in Spanish and math administered in 2004 to randomly selected students registered in different types of primary and secondary schools. These results appear in Tables 7a and 7b. It is apparent that the hierarchy for each type of school in the areas of language and math is the same as those reported by different researchers over the years. The inequalities in achievement associated with students' socioeconomic backgrounds have not disappeared with the passing of time.

Table 7a. Significant differences among average grades for 6th grade students

(Multiple comparisons)

READING

Modality	Average	Standard Error	Private	Urban Public	Rural Public	Community Centers	Indigenous Education
Private	367.99	3.67	NA	+	+	+	+
Urban public	497.33	1.57	-	NA	+	+	+
Rural public	462.33	1.79	-	-	NA	Ns	+
Community Centers	450.59	3.61	-	-	Ns	NA	+
Indigenous Education	424.85	2.67	-	-	-	-	NA

MATHEMATICS

Modality	Average	Standard Error	Private	Urban Public	Rural Public	Community Centers	Indigenous Education
Private	474.78	3.32	NA	+	+	+	+
Urban public	425.01	1.45	-	NA	+	+	+
Rural public	399.6	1.73	-	-	NA	Ns	+
Community Centers	385.79	3.82	-	-	Ns	NA	+
Indigenous Education	360.07	2.67	-	-	-		NA

Table 7b. Significant differences among average grades for 9th grade students (Multiple comparisons)

READING

Modality	Average	Standard Error	Private	General	Technical	Televised Classes
Private	649.25	4.57	NA	+	+	+
General	565.06	2.31	-	NA	Ns	+
Technical	563.94	2.09	-	Ns	NA	+
Televised Classes	523.88	5.39	-	-	-	NA

MATHEMÁTICS

Modality	Average	Standard Error	Private	General	Technical	Televised Classes
Private	504.08	3.42	NA	+	+	+
General	455.33	1.60	-	NA	Ns	+
Technical	454.76	1.40	-	Ns	NA	+
Televised Classes	440.30	3.60	-	-	-	NA

Note: The plus and minus signs indicate if the difference between the grade and the modality that appear in each column is greater or less than the one that corresponds to it in the respective column.

NA = Not applicable

Ns = No significant difference

Source: INEE (2004) Calidad de la Educación Básica en México

It is necessary to point out that the average grades of students enrolled in rural schools do not differ statistically from those of students attending community centers, nor do those of students enrolled in general secondary schools as compared to the grades of technical school students.

It is clear that the similarity that exists between the grade averages in rural schools and those in community centers is a favorable indicator for community center

elementary students since their achievement is not inferior to that of conventional rural school students. But while this may be true, the fact remains that grade averages in rural areas are inferior to those in urban areas.

On the other hand, it is important to emphasize the less fortunate situation of students attending televised classes because the schools offering them serve a student population that belongs to the lowest social class of the modalities listed. These students live in geographically isolated areas or in marginalized urban zones.

b) Evolution of inequality in the distribution of academic achievement over time

In order to analyze academic achievement over time, it was required that students take achievement tests (on different dates) which meet the psychometric conditions necessary to compare results from one time period to the next. Tests applied by the Mexican Secretariat of Education (known as "SEP" for its initials in Spanish) by means of the so called "*Estándares*" project yielded results coherent with diverse hypotheses, such as the relationship between achievement and marginalization levels of municipalities where the aforementioned tests were administered[9].

Moreover, since according to SEP," the values of achievement measurement (expressed in the Rasch scale) allowed to estimate comparable measurements of ability within a determined time frame [because] the tests given to the students had similar levels of difficulty[10]", we decided to carry out an appraisal of the Inter-temporal evolution of this phenomenon, by comparing the standard deviations of the performances achieved in the same school grades but on two different dates.

What we aimed to find out from this analysis was if the disparity of academic performance by students in municipalities of different levels of marginalization would improve or diminish over time, assuming that a larger amount of disparity implies more inequality and vice versa. To achieve this, we generated a sub-base of data made

[9] See, for example, INEE: 2004

[10] This quotation is from a document printed in 2003 by the Department of Statistical Analysis, Assistant Directorship of Elaboration and Application of Instruments of the SEP's General Director of Evaluation (author of the tests of reference) entitled "National Standards 1998-2002, Description of Achievement Data Tables"

up by the schools that were evaluated from 1999 to 2002. We then compared the standard deviations in the grades of third graders in 1999 to those of third graders in 2002.

Table 8 displays the results of this exercise, and an analysis of these results revealed, in general terms, a clear tendency towards a decrease in the standard deviations. In the majority of the thirty comparisons made, the signs of the differences among the deviations are negative. However—and most significantly—in the comparisons that refer to highly marginalized municipalities, the opposite occurred, which indicates that in these areas the inequality of academic achievement grew instead of diminishing between the different dates in the study.

Table 8. Comparison of the standard deviations in the distribution of grades obtained by students on different dates, with regard to the levels of marginalization of the municipalities where the schools are located

Levels of marginalization and types of measurements used	THIRD GRADE			SIXTH GRADE		
	Standard deviation 1999	Standard deviation 2001	Signs of differences (2001 – 1999)	Standard deviation 2000	Standard deviation 2002	Signs of differences (2000 – 2002)
VERY HIGH MARGINALIZATION						
Overall measurement	50.37	64.36	Positive	48.99	53.21	Positive
Spanish tests	49.94	62.35	Positive	65.04	65.59	Ns
Math tests	68.06	80.37	Positive	55.37	56.93	Positive
HIGH MARGINALIZATION						
Overall measurement	82.93	69.42	Negative	61.45	59.33	Negative
Spanish tests	75.33	64.61	Negative	74.44	68.86	Negative
Math tests	103.11	92.3	Negative	65.97	61.05	Negative
MEDIUM MARGINALIZATION						
Overall measurement	60.33	61.5	Ns	71.02	50.22	Negative
Spanish tests	62.47	63.86	Ns	82.06	60.62	Negative
Math tests	76.41	80.2	Positive	77.47	54.67	Negative
LOW MARGINALIZATION						
Overall measurement	67.11	66.55	Ns	72.64	57.46	Negative
Spanish tests	65.31	62.68	Negative	85.26	69.91	Negative
Math tests	85.55	86.44	Ns	76.75	58.05	Negative
VERY LOW MARGINALIZATION						
Overall measurement	70.38	67.35	Negative	74.55	65.85	Negative
Spanish tests	71.02	68.71	Negative	90.15	76.98	Negative
Math tests	87.93	84.71	Negative	78.41	67.68	Negative

It is, of course, difficult to explain this finding based on the information available. We could, however, hypothesize that the expansion of school enrolments in highly marginalized municipalities, which is a consequence of economic incentives that are being channeled through programs such as "Opportunities" to families of few resources that live in municipalities and have low indices of human development, is creating greater inequality in student academic achievement, i.e., it is associated with an increase in enrolment. Every time that these programs are able to enroll more children into school, these children come from more impoverished families. This could mean that the school system is not prepared to help children belonging to these families succeed in school. Thus, the generation, evaluation and availability of a series of innovations designed to solve this problem continue to be necessary.

B. Indirect assessments of the effects of these programs in the poorest Mexican states

1. Analysis based upon SEP´s "*Estándares*" project

In order to more carefully study the analyses of which the results are in the preceding paragraph, we thought it worthwhile to observe more closely the way in which achievement has evolved in the states of Chiapas, Guerrero, Hidalgo, and Oaxaca, which, as we pointed out earlier, are those that have been the target of PARE's efforts to increase school enrolment and are also those that have been exposed to compensatory programs to strengthen the school system for the longest amount of time.

To carry out this analysis we used the above-mentioned sub-base of data, which contains information from the group of schools that remained in the General Director of Education's "Estándares" project from 1999 to 2002. This information enabled us to compare the Spanish, math, and overall grades that third graders achieved in 1999 to those of sixth graders in the same schools in 2002. It is impossible to know if this comparison involved the same students, because it is quite probable that some students left the school for various reasons, including dropping out and moving away. It is also likely that students who had studied elsewhere enrolled in the schools involved in the study. Still, it is plausible that the majority of students who took the

tests in 2002 were enrolled in the same schools in 1999 and vice versa. The results obtained from the analysis appear in Tables 9, 10, and 11.

Table 9. Hierarchical positions that the different educational modalities occupy in the states analyzed based on Spanish grade averages

	SPANISH				
STATE/TYPE OF SCHOOLS	**3RD grade (1999)**	**Position in the state**	**6th grade (2002)**	**Position in the state**	**% Increase or decrease**
CHIAPAS					
Indigenous schools	364.5	4	402.8	4	10.5
Rural schools	407.3	3	448.9	3	10.2
Urban public schools	440.7	2	500.5	2	13.6
Urban private schools	497.4	1	572.5	1	15.1
GUERRERO					
Indigenous schools	416.1	4	393.1	4	-5.5
Rural schools	427.6	2	463.6	2	8.4
Urban public schools	421.3	3	465.8	1	10.6
Urban private schools	494.1	1	409.9	3	-17.0
HIDALGO					
Indigenous schools	398.8	4	399.5	4	0.2
Rural schools	427.7	3	496.6	3	16.1
Urban public schools	434.8	2	523.3	2	20.4
Urban private schools	522.4	1	569.5	1	9.0
OAXACA					
Indigenous schools	373.5	4	430.6	4	15.3
Rural schools	428.5	3	484.7	3	13.1
Urban public schools	454.0	2	514.7	2	13.4
Urban private schools					
Average					
Indigenous schools	388.2	4	406.5	4	4.7
Rural schools	422.8	3	473.5	3	12.0
Urban public schools	437.7	2	501.1	2	14.5
Urban private schools	504.6	1	517.3	1	2.5

Table 10. Hierarchical positions that the different educational modalities occupy in the states analyzed based on math grade averages

	MATHEMATICS				
STATE/TYPE OF SCHOOLS	**3RD grade (1999)**	**Position in the state**	**6th grade (2002)**	**Position in the state**	**% Increase or decrease**
CHIAPAS					
Indigenous schools	312.3	4	436.1	4	39.6
Rural schools	404.2	3	463.5	3	14.7
Urban public schools	448.7	2	494.4	2	10.2
Urban private schools	497.1	1	542.4	1	9.1
GUERRERO					
Indigenous schools	419.1	3	423.1	4	1
Rural schools	405.7	4	475	2	17.1
Urban public schools	428.7	2	478.4	1	11.6
Urban private schools	480.2	1	424.4	3	-11.6
HIDALGO					
Indigenous schools	380	4	408.6	4	7.5
Rural schools	427.2	3	490.1	3	14.7
Urban public schools	431.7	2	508.3	2	17.7
Urban private schools	516.3	1	546	1	5.8
OAXACA					
Indigenous schools	316.6	4	451.1	4	42.5
Rural schools	419	3	493.9	3	17.9
Urban public schools	461.6	2	512	2	10.9
Urban private schools					
Average					
Indigenous schools	357	4	429.7	4	20.4
Rural schools	414	3	480.6	3	16.1
Urban public schools	442.7	2	498.3	2	12.6
Urban private schools	497.9	1	504.3	1	1.3

Table 11. Hierarchical positions that the different educational modalities occupy in the states analyzed based on global grade averages

	GLOBAL SCORE				
STATE/TYPE OF SCHOOLS	**3RD grade (1999)**	**Position in the state**	**6th grade (2002)**	**Position in the state**	**% Increase or decrease**
CHIAPAS	338.3	4	416.0	4	23
Indigenous schools	404.9	3	454.8	3	12.3
Rural schools	445.0	2	497.8	2	11.9
Urban public schools	496.8	1	558.4	1	12.4
Urban private schools					
GUERRERO	419.6	3	405.3	4	-3.4
Indigenous schools	416.7	4	468.3	2	12.4
Rural schools	426.7	2	479.9	1	12.5
Urban public schools	486.2	1	415.8	3	-14.5
Urban private schools					
HIDALGO	390.6	4	404.2	4	3.5
Indigenous schools	427.7	3	493.3	3	15.3
Rural schools	434.0	2	516.3	2	19
Urban public schools	517.8	1	558.2	1	7.8
Urban private schools					
OAXACA					
Indigenous schools	347.2	4	438.8	4	26.4
Rural schools	424.4	3	488.2	3	15
Urban public schools	457.8	2	513.3	2	12.1
Urban private schools					
CHIAPAS Average	**CHIAPAS**	**CHIAPAS**	**CHIAPAS**	**CHIAPAS**	**CHIAPAS**
Indigenous schools	373.9	4	416.1	4	11.3
Rural schools	418.4	3	476.2	3	13.8
Urban public schools	440.9	2	501.8	2	13.8
Urban private schools	500.3	1	510.8	1	2.1

These charts show that in the four states considered in the analysis (and in their averages), the Spanish, math, and overall grades that the third and sixth-grade students

achieved in the schools corresponding to the four modalities mentioned previously in this chapter (indigenous, rural, urban public, and private schools) correlated with very few exceptions with the social classes to which the majority of students belonged. Thus, although the schools located in low socio-economic areas in the interior parts of the states considered in the analysis have received PARE support for more than a decade, the inequalities in the distribution of educational opportunities that were detected at a national level are still present in these states. In fact, in almost all of the comparisons, private schools rank in first place, urban public schools in second, rural schools in third and indigenous schools in fourth.

In addition, Table 12 indicates the differences between the grades obtained by third and sixth graders enrolled in the schools in the analysis. On observing the magnitude of the differences found among global grades corresponding to the public schools, we can detect the following:

- The most important differences are seen in the indigenous schools in Oaxaca as well as the rural and urban schools in Hidalgo.

- The indigenous schools in Chiapas as well as the rural and urban schools in Oaxaca are in second place.

- Hidalgo's indigenous schools along with Guerrero's rural and urban schools occupy third place.
- Finally, there are the indigenous schools in Guerrero and the rural and urban schools of Chiapas.

Table 12. Differences between average 3rd and 6th grade average grades corresponding to the different educational modalities

	INDÍGENOUS			RURAL			URBAN PÚBLIC			URBAN PRIVATE			SCHOOL RANKING		
	3rd	6th	Dif.	3rd	6th	Dif.	3rd	6th	Dif.	3rd	6th	Dif.	INDIGENOUS	RURAL	URB. PUB.
CHIAPAS															
Spanish	365	403	38.3	407	449	41.6	441	501	59.8	497	573	75.1	2	3	3
Mathematics	312	436	124.0	404	464	59.3	449	494	45.7	497	542	45.3	2	3	4
Global	338	416	77.7	405	455	49.9	445	498	52.8	497	558	61.6	2	4	4
GUERRERO															
Spanish	416	393	-23.0	428	464	36	421	466	44.5	494	410	-84.2	4	4	4
Mathematics	419	423	4.0	406	475	69.3	429	478	49.7	480	424	-55.8	4	2	3
Global	420	405	-14.3	417	468	51.6	427	480	53.2	486	416	-70.4	4	3	3
HIDALGO															
Spanish	399	400	0.7	428	497	68.9	435	523	88.5	522	570	47.1	3	1	1
Mathematics	380	409	28.6	472	490	17.9	432	508	76.6	516	546	29.7	3	4	1
Global	391	404	13.6	428	493	65.6	434	516	82.3	518	558	40.4	3	1	1
OAXACA															
Spanish	374	431	57.1	429	485	56.2	454	515	60.7	n.d	n.d	n.d	1	2	2
Mathematics	317	451	135	419	494	74.9	462	512	50.4	n.d	n.d	n.d	1	1	2
Global	347	439	91.6	424	488	63.8	458	513	55.5	n.d	n.d	n.d	1	2	2

It is evident that the advances in achievement identified by means of this method are not concentrated in any of the educational modalities considered in the analysis. This is probably due to the fact that the implementation of compensatory programs has not been uniform in the four states where these programs directed their support for a longer period of time.

2. Preliminary analysis of effects over time

Another means for obtaining an indicator of the educational effects of the compensatory programs is to analyze if, over time, the grade averages of students enrolled in indigenous and rural schools that have received program aid come closer

to or farther from corresponding grade averages for students who attend urban schools in the same states.

To make this analysis, we used the information about achievement that is located in the data sub-base referred to earlier in this chapter. We also employed information that one of us, with the help of a research team, generated in 1995 to evaluate PARE's educational impact[11].

Since both measurements used different measuring units[12], we had to make them match in order to establish the comparisons that we were trying to carry out. To this end, we described the grades from rural and indigenous schools as percentages that corresponded to those of urban schools in each of the stated measurements[13].

The results appear in Table 13. It indicates that in 2002 there was a decrease in the difference between grades in rural and indigenous schools and those in urban schools. Rural school grades rose by 13.2% in Spanish and 8.1% in math.

Table 13. Grades on 6th grade Spanish and math tests in rural and indigenous schools, respectively, described as percentages of the corresponding urban schools

SCHOOLS COMPARED	SPANISH (6th grade)	MATHEMÁTICS (6th grade)
Rural / Urban		
Measurements PARE (1995)	81.3%	89.5%
Measurements 2002	94.5%	97.6%
Differences	13.2%	8.1%
Indigenous/ Urban		
Measurements PARE (1995)	73.7%	81.0%
Measurements 2002	81.1%	86.2%
Differences	7.4%	5.3%

[11] See Muñoz Izquierdo and R. Ahuja (2000)

[12] PARE's grades were reported in standardized units; meanwhile, as indicated above, grades of the most recent measurement were reported in "Rasch" units.

[13] It should be noted that, in order to carry out PARE's evaluation, both rural and urban school were divided into two strata, respectively. Therefore, to make the comparison that we are reporting here, we obtained a single value for each educational modality, averaging the grades corresponding to the two strata mentioned.

Indigenous schools, on the other hand, advanced more slowly. In fact, the gap that separates their grades from those of urban schools declined 7.4% in the Spanish tests and 5.3% in the math tests. This result is significant in light of the fact that the improvement "ceiling" that these grades had in 1995 compared to urban school grades was higher than that of rural schools. This is consistent with the hypothesis that the educational policies are not being as effective in satisfying the needs of the indigenous population as they are in satisfying the needs of the remaining rural population.

As previously stated, it is worth noting that the INEE has detected the existence of certain technical problems that may limit the validity of the grade comparisons over time such as those that we are reporting. However, the DGE published a document (cited above) in which it reports that the achievement tests that it administers over time have similar degrees of difficulty.

Nevertheless, if other interferences in these observations (such as those that could be attributed to the sampling designs used by the DGE for its measurements each time that PARE's measurements are based on a multi-staged random design) did not exist, it would be possible to state that, due to the magnitude of the changes detected in this analysis (especially those related to Spanish tests) the academic achievement of students in rural and indigenous schools located in the four states included in the analysis has been approaching that of students enrolled in urban public schools.

What we are reporting may very well be attributed to the interaction of greater educational supply and demand that is a result of the simultaneous implementation (in approximately 85% of the cases) of compensatory programs and programs that offer economic support to impoverished rural and indigenous families. From this finding, it is possible to deduce that the improvement in children's school attendance and their staying in school (as several research projects that we cite in the next part of this chapter have demonstrated) is being driven by the economic incentives that the "Opportunities" program supplies. This is less apparent in indigenous schools than in urban and rural schools, which could mean that the educational model being implemented is less efficient—by being less pertinent—in indigenous schools than in others. Therefore, economically and culturally disadvantaged students who live in underdeveloped areas and who enter and stay in schools are contributing to the

increase, in these areas, the magnitude of the disparities in the distribution of academic achievement.

Since this analysis suggests that the incentives mentioned here are more beneficial to students who do not live in the poorest socio-economic conditions, we may conclude that the school system is not designed to ensure that those students who attend indigenous schools receive an education capable to satisfy their particular needs.

C. Direct assessments

1. Programs designed to improve quality of educational inputs and processes

PARE is the only program of this type implemented in Mexico of which the educational effects have been evaluated on the basis of a longitudinal and quasi-experimental design. This evaluation was carried out by Muñoz-Izquierdo, C with the support of a research team.

The PARE program—like others in its family—was based on the premise that educational achievement would improve if historical inequalities could be reduced in the area of school resource investment levels, as they exist in different socio-demographic environments. To correct inequalities, PARE provided schools with a range of resources aimed at improving academic achievement in those schools, through a strategy of positive discrimination. The evaluation showed that, in effect, the support channeled to schools by this program was distributed according to the intended strategy, since during the period of the study (1992-1995) the schools located in less developed communities were found to have received more resources than other schools.

However, despite observed improvement in the resources provided to these schools, academic achievement test results remained unsatisfactory. Achievement did not improve in critical areas. In general, achievement in mathematics was lower than achievement in Spanish. Even achievement from those students who had gotten higher scores at the beginning of the study remained stable or even decreased, rather than

increased over time. (See Muñoz-Izquierdo: 2000)

It is important to note that when the program was implemented, its administrators did not fulfill many of the requirements implicit in the original model, since its component selection was not based on an investigation of unsatisfied needs in the different schools. These components were generally administered in a disconnected way, and some were not delivered on time. The evaluation also discovered a gap between the pedagogic theories on which teacher training courses were based (constructivism) and those on which the didactic materials were based. The teacher training courses were distributed vertically, i.e., in a trickle-down manner, so that the courses were not always given by qualified personnel. Frequently, supervisors did not contribute as they should have in the teacher training.

Despite the noted limitations, there remains no doubt that the increased resources provided to the schools did not produce the educational improvements envisioned by the program designers. This conclusion is based on evaluation results from several regression models that analyzed the efficacy of several support (component) combinations provided by PARE. The models showed that, in effect, academic achievement was not sensitive enough to the input combinations being considered by the model (the corresponding regression coefficients were not of the expected magnitude). From our point of view, the study findings indicate that, to significantly decrease the disparities of educational opportunities in Mexico, it is not enough to improve, by several degrees, the quality of school inputs.

It is important to point out that these findings are apparently–but not actually–different from those which were reported in section A-1 of this chapter, since the reader should note that these results can not be compared to the ones previously reported. While results previously reported come from evaluations aimed at assessing the program effects on school attendance, these come from an evaluation aimed at assessing the effects of compensatory programs on academic achievement. Also, it is important to note that findings reported in that section of this chapter come from evaluations carried out when programs aimed at improving quality of school inputs and processes were mainly implemented in communities which were also receiving the benefits of programs aimed at overcoming the effects of educational opportunity costs.

2. Programs designed to reduce educational opportunity costs

The one program of this type that has undergone intense and rigorous evaluation is the "Program of Human Development Opportunities" (referred to as "OPORTUNIDADES"). Several studies of this program are available, due to the government's keen interest in seeing results in several areas (including those of the educational nature)[14]. It is important to note that these studies have been carried out with different databases, their geographical coverage has differed, and their authors have used different methodologies. Next, a brief review of these studies is presented.

a) Effects on school attendance and course repetition

Shultz's studies referred to the PROGRESA program (this program, as previously mentioned, is the predecessor of the Oportunidades program) and used information from some states in Mexico. Shultz found that "at the primary level….statistical methods…revealed that PROGRESA succeeds at increasing the enrollment rate of boys by 0.74 to 1.07 percentage points and of girls by 0.96 to 1.45 percentage points. At the secondary level…the increase in enrollment effects for girls ranged from 7.2 to 9.3 percentage points and for boys from 3.5 to 5.8 percentage points. This represents a proportional increase of boys from 5 to 8 percent and of girls 11 to 14 percent."

According to Shultz, "if these effects could be sustained over the period in which a child is of school age, the accumulated effect on educational attainment for the average child from poor households would be the sum of the estimated change for each grade level. Summing these values for grades 1 to 9 suggests that the program can be expected to increase educational attainment of the poor of both sexes by 0.66 years of additional schooling. Girls in particular gain 0.72 years of additional schooling by the 9th grade while boys gain 0.64 years". Skoufias and McClafferty point out that "given that the average youth aged 18 achieved about 6.2 years of completed schooling prior to the program, these data are suggestive of an overall increase in educational attainment of about 10 percent". Shultz also found that "the

[14] See Schultz. T.P. (2000); Behrman, Jere R., Piyali Sengupta and Petra Todd, (2000) Skoufias, Emmanuel and Bonnie McClafferty, (2001); Escobar Latapí, Agustín and Mercedes De la Rocha (2003); Parker, Susan W (2004)

impact of PROGRESA on enrollment rates is largest for children who have completed the 6th grade and are thus qualified to enroll in junior secondary school, increasing 11.1 percentage points for both sexes combined of 14.8 percentage points for girls and 6.5 percentage points for boys, representing percentage increases of over 20% for girls and about 10% for boys."

The studies mentioned were updated—widening their coverage to the national level—by S. Parker (2004). Parker sought to analyze the impact of Oportunidades in secondary schools and high schools, and she used information regarding desertion (drop-out) and grade repetition rates in the cycle 1995-1996 to the cycle 2002-2003. Parker found that Oportunidades has an important impact on student enrollment in rural secondary schools, and that the impact has grown over time. This increase has been on telesecundarias and general secondary schools, with increases of 24.0% in the cycle 2002-2003. In urban zones, the impacts of Oportunidades are smaller and imply an increase in student enrollment around 4.9% for the cycle 2002-2003, mainly in the female population.

Likewise, Parker observed that "the results at the high school level are astonishing. The estimated impacts are substantial, indicating that only two years after the implementation of the Program giving scholarships at this level, student enrollment in the first grade of high school has increased in an 84.7% in rural areas and 10.1% in urban areas, using the same student enrollment in the cycle 2001-2001 as a base".

Regarding elementary schools, Parker mentions that "in preceding studies, it was shown that Oportunidades had not had an important impact on student enrollment (in this educational level). She attributes this observation to the fact that student enrollment at the elementary school level was very high even before that the program started". That is why she does not take into consideration the lag represented by the existing differences among the student ages and the grades in which they are registered. However, Parker affirms that her "analysis on the effects of desertion and repetition in elementary school, shows that Oportunidades seems to have a positive effect. More than 17.4% from the male students who drop out from elementary school, stop doing so as a result of the program in rural areas (17031 male students). Regarding grade level repetition in these same areas, the effects are lower but significant, implying that around 4.3% of the male students and 8.9% of the female

students that would repeat any grade in elementary school stop doing so as a result of the implementation of Oportunidades (10529 male students and 14265 female students). In urban areas, significant effects are also observed in reducing repetition. The effects on the repetition rate are a little bit higher than the ones in rural areas showing reductions from 7.9% in the percentage of male students who repeated grade and 12.9% in female students (16988 male students and 18673 female students). In elementary schools in urban areas, Oportunidades reduces the drop out rate around 5.7% for female students and 3.5% for male students (6001 male students and 8378 female students)."

Parker also analyzed the impact Oportunidades has had on reducing the gap of student enrollment, grade repetition and dropping out among male and female students. She found that "in rural secondary schools, Oportunidades seems to contribute to eliminating the gap between male and female students. Before the implementation of the program, there were 83 female students registered for every 100 male students. Considering only the impact of the program, this figure grew up to 96 female students for every 100 male students registered for the cycle 2002-2003. As a result of the program, in urban secondary schools, the gap was reduced considerably in the first two grades (from 92 to 95 female students for every 100 male students in the first grade and from 95 to 99 female students for every 100 male students in second grade) and for the third grade, the trend even reversed".

In high school, Parker observed that "while the gap in rural areas was not very wide before the implementation of the program (92 and 98 female students registered for every 100 male students in the first and second grades, respectively), Oportunidades has not helped to reduce the gender gap. Even though it is important to highlight that these gaps in practice have almost been eliminated, they may be due to other impacts in the enrollment of male and female students not associated to the Oportunidades program. In urban areas, where the enrollment of male and female students was very similar before the beginning of the program (98 and 109 female students for every 100 male students, respectively), Oportunidades had a bigger impact on the enrollment of female students which would translate into figures of 100 female students for every 100 male students in the first grade (the gap is eliminated) and 111 female students for every 100 male students in the second grade, widening the inverted gap (that is, favoring female students)".

Lastly, in the elementary schools Parker detected that the impact on repetition, where female students had much lower repetition rates than male students even before the implementation of Oportunidades, was that the program increased the gap. On the other hand, the drop out rates, which before Oportunidades were bigger for male students than female students, were reduced by the program. Oportunidades reduced this inverted gap in rural, but not in urban areas.

Likewise, Escobar and González de la Rocha (2003) carried out a qualitative study to discover the social dynamics on which the academic success or failure of the Program depended.

While looking for reasons why students who receive the scholarship attend school, they observed the following: “In the first place there is a clear awareness that, once the scholarship is granted, students can keep it only if they stay in school. In the second place, money devoted to school materials such as notebooks, pencils, uniforms, and shoes increased when households received the first two payments from the Program. Finally, students have breakfast more frequently than before. This is a decisive factor that in many families favors school attendance.”

On the one hand, these researchers report that “the calculations families make show that the scholarship and the amount dedicated to school materials is not enough to cover the fees and the direct and indirect school costs, but the help received is very significant; the fact is that the amount, added to the co-responsibility, is leaning the balance in favor of more years of schooling.”

On the other hand, they found that “most cases of children or youths, who had already dropped out of school, have not come back”; this is attributed to three reasons: the first is that some young students had migrated, simply in search of better jobs in other cities (or in the United States), or because they had to satisfy the urgent needs of their families. The second reason is early pregnancy or the abandonment of their homes, in the case or female students. The third is that several of these young students (between 13 and 16 years) were economic providers in their homes and could not quit that role.

Finally, Escobar and González de la Rocha report that “a finding that emerged from the case studies and the focus groups is that Oportunidades raised parents’ and students’ educational goals and expectations”.

b) Effects on achievement

Some of the previously mentioned studies analyze disparate program effects and analyze elements such as dropout rates and retention. However, the analyzed variables may not reflect, in a reliable and objective way, actual student achievement. Students progress through grade levels and some achievement measures depend on decisions made by individual teachers in the group; these decisions reflect variable judgment and values. Sometimes the decision to pass or fail a given student depends on factors other than achievement, such as an attendance record; since some teachers may believe that students who attend school regularly are the ones who acquired the knowledge and developed the skills necessary to satisfactorily complete the grade and advance to the next level. However, there is no evidence that this supposition is based on the learning that beneficiaries of the program have objectively acquired.

The impact of family subsidies on academic achievement (which is a dependent variable different from those related to school attendance and terminal efficiency) has only been objectively evaluated by one study (Berhman, Sengupta and Todd: 2000). Due to the year in which this study took place, its results refer to PROGRESA. However, it is important to notice that the PROGRESA program strategies are similar to those embodied in “Oportunidades program”. Below there is a transcription of some paragraphs from that study:

> To permit evaluation of the impact of PROGRESA on achievement test scores, PROGRESA arranged for the Secretary of Pubic Education (Secretaría de Educación Pública, SEP) to administer the same tests for students in schools attended by individuals in the PROGRESA Evaluation Sample as SEP administers annually to a national sample of schools. These tests were administered to students in about 500 primary and secondary schools in the localities in the PROGRESA Evaluation Sample plus schools close to these localities.

> The result of primary interest is that after almost a school year and a half of exposure to PROGRESA, there is no significant positive impacts of PROGRESA on the achievement test scores. There are somewhat more cases in which the control group test scores exceed the treatment group scores than could be expected by chance, which to a very limited degree may be related to compositional changes. But, in any case, there is not evidence of significantly positive effects even when compositional effects are taken into account in so far as they can be with the available data. Possibly this may reflect the limitations in the data noted above, particularly regarding the possibility of evaluating on the effect after a little more than a year of exposure to the program, but also possibly the relatively small sample sizes and the limited number of observations that could be merged with household survey data.

The cited evaluation clearly had some limitations, such as the following:

> "the tests were given only to a sub sample of those in the Evaluation Sample who were enrolled in school, and this sub sample was not selected to be a random sample. A related point is that success in linking achievement test scores to children in the evaluation samples has been limited to fairly small proportions of the children in the Evaluation Sample households surveys, which limits severely in practice the possibility of controlling for possible selectivity in test taking." (Berhman, Sengupta and Todd::op. cit)

Finally, the finding that there are no statistically significant differences in academic achievement between those students who participated in the program and those who did not casts serious doubts on the effectiveness of the educational model to which students participating in the study were exposed[15]. It should be kept in mind that these programs are certainly improving student's attendance to school, which implies a more intense exposure to such model. Therefore, the observation that a more intense exposure to such model is not positively influencing students' learning can be

[15] From our point of view, the educational model is composed of all the elements that take place in the school system. Among them: the curriculum, didactics, student-teacher interaction, teacher training, teacher's, principal's supervisor's behavior; school resources and facilities, and so on.

interpreted as a signal that the processes taking place inside the classrooms are not relevant enough from the pedagogical point of view.

IV. SUMMARY AND CONCLUSIONS

- Despite the programs that Mexico has implemented to satisfy scholastic demand and opportunity, the eternal relationship that has existed between academic achievement and a student's socioeconomic and cultural background has not disappeared for two reasons. The first lies in the correlation that exists between hierarchical positions that schools occupy (from the point of view of their students' academic achievements) and the socioeconomic strata that the students' families occupy. The second lies in comparing academic achievement in schools located in municipalities of differing levels of marginalization. Research for this article shows tendencies that favor schools in municipalities of lower levels of marginalization.

- There is also tentative evidence (since it is not a result of longitudinal studies carried out in the same school complexes) that rural school student achievement is catching up with the achievement of students attending public urban schools. This tendency does not hold true, however, for predominantly indigenous school populations, which casts doubts on the effectiveness of the educational model being implemented, in spite of the compensatory programs' reinforcement in these scholastic centers.

- An analysis of the changes that have taken place over the past few years in the variation in achievement scores reported by schools in municipalities with differing indices of marginalization reveals that the most marginalized municipalities have the highest variation. The "Oportunidades" program in these areas is attracting and keeping students from families that are the most highly disadvantaged, both culturally and socio-economically, in school. The fact that the pre-existing disparities in academic achievement in these places are increasing could reinforce the previously-stated hypothesis that refers to

the ineffectiveness of the educational model implemented in these highly marginalized areas.

- There is sufficient direct and indirect evidence to conclude that the "Oportunidades" program is instrumental in raising school enrollment and attendance levels as well as keeping students in school for longer periods of time.

- This program is also contributing to a decrease in course failures. This decrease, however, does not reflect an effective improvement in achievement as measured by externally generated standardized tests. Although the program improves student attendance, at the same time it leads to longer periods of teacher exposure to classmates from lower social strata, and this increased exposure is not producing tangible improvements in academic achievement. This observation reinforces the previously stated interpretation of the educational model's ineffectiveness above all in schools operating under highly precarious conditions.

- The research into factors that determine academic achievement has consistently demonstrated that modifications in this variable do not depend only on the cost of opportunity that is partially compensated by the subsidies that the "Oportunidades" program distributes among needy families. It depends as well on the quality and use of the schools' human, material, and pedagogical resources as well as on the learning that takes place inside the classrooms. The research has also demonstrated that variables inside the schools do not make up for the influence of external factors, which have direct or indirect bearing on academic achievement.

- Because of this, Mexico has implemented a series of compensatory programs to improve the quality of the resources that are available to schools operating under precarious conditions. The country is confident that these programs will improve the quality of teaching-learning processes as well.

- Government authorities have not followed strategies that are specifically aimed at assuring that compensatory programs are implemented in the same schools

that receive beneficiaries of the “Oportunidades” program. However, since those in charge of both types of programs have the same goal of aiding the country’s poorest communities (not precisely as a result of adequate planning), 85% of the cases of both types of programs are in effect in the same geographical areas.

- In spite of this high convergence of both types of programs, exposure to the “Oportunidades” program has not produced positive results in academic achievement, suggesting that compensatory programs are not effective. The next question (beyond that of fostering legitimacy) is: What sense is there in continuing to invest resources to keep children and teenagers in schools where academic performance is deficient and in compensatory programs that, according to the research findings presented here, fail to achieve their goals?

- Research into factors that determine achievement (and more precisely research into the focus of efficient schools) has identified a variety of alternatives to improve academic achievement. (See Posner, C: 2004 and Murillo-Torrecilla: 2004 for studies carried out in European Countries; and Muñoz-Izquierdo and A. Marquez: 2004 for a study carried out in Mexico) It has also determined that Mexico possesses (from a technical point of view) a wide margin of action to elevate its schools’ academic scores. (See OECD: 2003)

- Therefore, it is necessary to put these findings into use and conduct controlled and adequately evaluated experiments, so that we may detect the educational innovations and policies that are feasible, pertinent, and effective for the country’s different regions and communities.

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