

*Tables*

**Table 1, Brazil: Enrollment and Percent of Enrollment in Nine-Year Reform Basic Education, by State, 2005, 2006, 2007**

State	2005		2006		2007	
	Enrollment 9-Year Schools	%	Enrollment 9-Year Schools	%	Enrollment 9-Year Schools	%
Rondônia	30,296	9.7%	39,259	12.6%	130,965	43.4%
Acre	5,929	3.9%	5,838	3.7%	9,892	6.4%
Amazonas	148,900	19.0%	228,305	28.5%	452,068	58.4%
Roraima	1,863	2.3%	4,405	5.2%	7,904	9.5%
Para	56,931	3.5%	94,153	5.9%	122,296	7.9%
Amapá	0	0.0%	1,076	0.8%	4,313	3.1%
Tocantins	12,151	4.5%	135,313	49.1%	253,536	91.2%
Maranhão	157,132	10.2%	297,328	19.8%	384,659	27.2%
Piauí	128,555	18.6%	233,448	34.9%	276,037	44.2%
Ceará	724,407	42.0%	891,685	52.6%	1,596,103	98.4%
R, G, do Norte	299,682	50.8%	568,523	96.6%	562,380	99.4%
Paraíba	76,010	9.3%	232,840	30.0%	574,859	80.8%
Pernambuco	168,208	9.8%	218,452	13.0%	304,696	19.6%
Alagoas	12,593	1.8%	81,703	11.6%	255,086	38.2%
Sergipe	6,318	1.6%	12,846	3.2%	75,983	20.0%
Bahia	198,902	6.7%	379,662	13.2%	608,239	23.1%
Minas Gerais	3,016,901	88.5%	3,168,985	94.8%	3,082,341	95.2%
Espírito Santo	11,934	2.1%	39,969	7.1%	90,246	16.3%
Rio de Janeiro	2,104,017	84.9%	2,143,013	88.3%	2,211,497	95.9%
São Paulo	116,062	2.0%	311,182	5.2%	868,959	14.4%
Paraná	126,375	7.6%	122,371	7.4%	93,004	5.5%
Santa Catarina	80,227	8.5%	122,162	12.8%	247,381	26.9%
R, G, do Sul	138,733	8.5%	230,505	14.0%	308,873	19.0%
M, G, do Sul	642	0.1%	1,063	0.2%	407,527	96.5%
Mato Grosso	284,033	47.2%	306,743	53.0%	327,960	62.5%
Goiás	198,315	19.3%	772,095	74.8%	886,427	91.6%
Distrito Federal	8,703	2.3%	22,691	5.8%	68,732	17.9%

Source: Brazil, Ministerio da Educacao e Cultura,  
[http://portal.mec.gov.br/arquivos/pdf/ensino\\_9anos.pdf](http://portal.mec.gov.br/arquivos/pdf/ensino_9anos.pdf)

**Table 2. Brazil: Pre-treatment and Post-treatment Prova Brasil 4<sup>th</sup>/5<sup>th</sup> Grade Test Scores and Means of Control Variable for Treatment and Control Schools that Took End of Primary Test (standard deviations in parentheses)**

<i>Outcome (school level)</i>	<b>Treatment Schools (five years of schooling)</b>		<b>Control Schools (four years of schooling)</b>	
	<i>2007 (pre-)</i>	<i>2011 (post-)</i>	<i>2007 (pre-)</i>	<i>2011 (post-)</i>
Mathematics	188.9 (19.2)	209.6 (23.1)	184.5 (17.9)	196.1 (21.6)
Portuguese	171.6 (17.8)	190.8 (20.0)	167.4 (16.8)	178.5 (18.6)
% Pre-School (2007)	0.703 (0.104)		0.698 (0.097)	
% Mother's Education >=HS (2007)	0.199 (0.101)		0.212 (0.106)	
CB Parcial (2007)	19.723 (3.070)		19.530 (3.506)	
Average Student Age in 4 <sup>th</sup> Grade (2007)	10.947 (0.335)		10.790 (0.456)	
Number of Observations	4,500	4,500	2,272	2,272

Source: Authors' estimates from *Prova Brasil, Final Year Primary School Test*, 2007, 2009, 2011. *Censo Escolar*, 2007. The means and standard deviations in this table are for a sample of schools in which students took 4<sup>th</sup> or 5<sup>th</sup> grade and 8<sup>th</sup> grade *Prova Brasil* test in 2007, 2009, and 2011.

**Table 3. Brazil: Estimated Difference-in-Difference-in Difference on Student Achievement of Treatment Effect of Additional Year of Primary Education, Pre-Treatment 2007, Post-Treatment 2011 (points of Prova Brasil End of Primary School)**

<i>Variable</i>	<i>Mathematics</i>	<i>Portuguese</i>
Fiveyear*2011*grade5	4.752** (1.508)	4.996*** (0.970)
Fiveyear*2011	4.445*** (1.171)	3.135* (1.438)
Fiveyear*grade5	-1.215 (1.196)	-0.501 (0.957)
Grade5*2011	7.170*** (1.436)	0.773 (0.464)
Fiveyear (school)	0.310 (1.855)	0.839 (1.538)
Grade5	-49.921*** (0.869)	-56.299*** (0.782)
2011	4.392*** (0.627)	10.381*** (0.976)
% Pre-School	50.989*** (6.638)	38.867*** (5.068)
% Mother's Education >= HS	17.944*** (4.542)	20.111*** (2.941)
CB Parcial	2.898*** (0.285)	2.900*** (0.220)
Student Age in 2011	2.750+ (1.574)	2.023 (1.319)
Constant	108.111*** (24.28)	112.609*** (19.73)
State Fixed Effects	Yes	Yes
Adjusted R <sup>2</sup>	0.799	0.860
Number of Observations	27,088	27.088

Source: Authors' estimates from *Prova Brasil, Final Year Primary School Test and Final Year Middle School Test, 2007, 2009, 2011. Censo Escolar, 2007*. The sample of schools used to estimate regressions in this table is restricted to schools in which students took 4<sup>th</sup> or 5<sup>th</sup> grade and 8<sup>th</sup> grade *Prova Brasil* tests in 2007, 2009, and 2011. There are 4 observations (two grades and two years) for each of the 6,772 schools in the sample.

Notes: +p>0.10; \*p>0.05; \*\*p>0.01; \*\*\*p>0.001

**Table 4. Brazilian States Implementing and Not Implementing 9-year Basic Education 2005: Average Mathematics & Language Achievement in Treatment & Control Schools, 2007, 2009, 2011**

<i>Outcome (school level)</i>	<b>Five Year (Treatment)</b>			<b>Four Year (Control)</b>		
	<i>2007 (pre-)</i>	<i>2009 (post-)</i>	<i>2011 (post-)</i>	<i>2007 (pre-)</i>	<i>2009 (post-)</i>	<i>2011 (post-)</i>
<i>States Implementing</i>						
Mathematics	188.5 (19.6)	204.2 (24.5)	210.7 (22.5)	177.9 (17.0)	184.1 (16.9)	186.5 (17.4)
Portuguese	171.2 (18.4)	184.4 (20.5)	191.4 (19.3)	160.8 (13.7)	166.4 (15.2)	171.8 (15.5)
Number of Observations	2,706	2,706	2,706	95	95	95
<i>States Not Implementing</i>						
Mathematics	189.4 (18.5)	197.4 (20.8)	208.0 (23.8)	184.8 (17.9)	195.8 (21.5)	196.5 (21.7)
Portuguese	172.2 (16.8)	178.6 (18.3)	189.9 (21.0)	167.6 (16.9)	176.1 (18.3)	178.8 (18.7)
Number of Observations	1,794	1,794	1,794	2,177	2,177	2,177

Source: Authors' estimates from *Prova Brasil, Final Year Primary School Test*, 2007, 2009, and 2011; *Censo Escolar*, 2007. The means and standard deviations in this table are for a sample of schools in which students took 4<sup>th</sup> or 5<sup>th</sup> grade and 8<sup>th</sup> grade *Prova Brasil* test in 2007, 2009, and 2011.

**Table 5. Brazilian States Implementing and Not Implementing 9-year Basic Education 2005: Difference-in-Difference-in-Difference Estimates of Additional Year of Primary School Effect, 2007-2009 (points on Prova Brasil test).**

Variable	States with Significant Percent of 9-year Basic Education in 2005		States without Significant Percent of 9-year Basic Education in 2005	
	Mathematics	Portuguese	Mathematics	Portuguese
Fiveyear*2011*grade5	6.072 (3.446)	4.616* (1.812)	-4.350* (2.000)	-3.415* (1.292)
Fiveyear*2011	3.445+ (1.599)	3.012+ (1.353)	1.413* (0.579)	1.423* (0.54)
Fiveyear*grade5	1.489 (2.309)	-0.776 (1.399)	-1.227 (1.238)	-0.233 (1.288)
Grade5*2011	5.251* (1.804)	-4.558** (0.919)	9.806*** (2.106)	-1.191 (1.339)
Fiveyear (school)	-3.728** 0.868	-0.684 0.666	2.074 (1.425)	1.887+ (1.054)
Grade5	-52.697*** (1.964)	-56.198*** (1.337)	-49.800*** (0.869)	-56.303*** (0.822)
2011	0.91 (1.647)	10.154*** (1.352)	1.128* (0.435)	9.609*** (0.469)
Constant	114.449*** (20.654)	113.410*** (13.544)	83.378+ (43.077)	81.530* (33.300)
Student Characteristics and Student SES				
Covariates Included	Yes	Yes	Yes	Yes
State Fixed Effects	Yes	Yes	Yes	Yes
R <sup>2</sup>	0.765	0.837	0.808	0.870
Number of Observations	11,204	11,204	15,844	15,844

Source: Authors' estimates from *Prova Brasil*, Final Year Primary School Test, 2007, 2009, 2011; *Censo Escolar*, 2007. The sample of schools used to estimate regressions in this table is restricted to schools in which students took 4<sup>th</sup> or 5<sup>th</sup> grade and 8<sup>th</sup> grade *Prova Brasil* tests in 2007, 2009, and 2011.

Notes: +p>0.10; \*p>0.05; \*\*p>0.01; \*\*\*p>0.001

## Figures

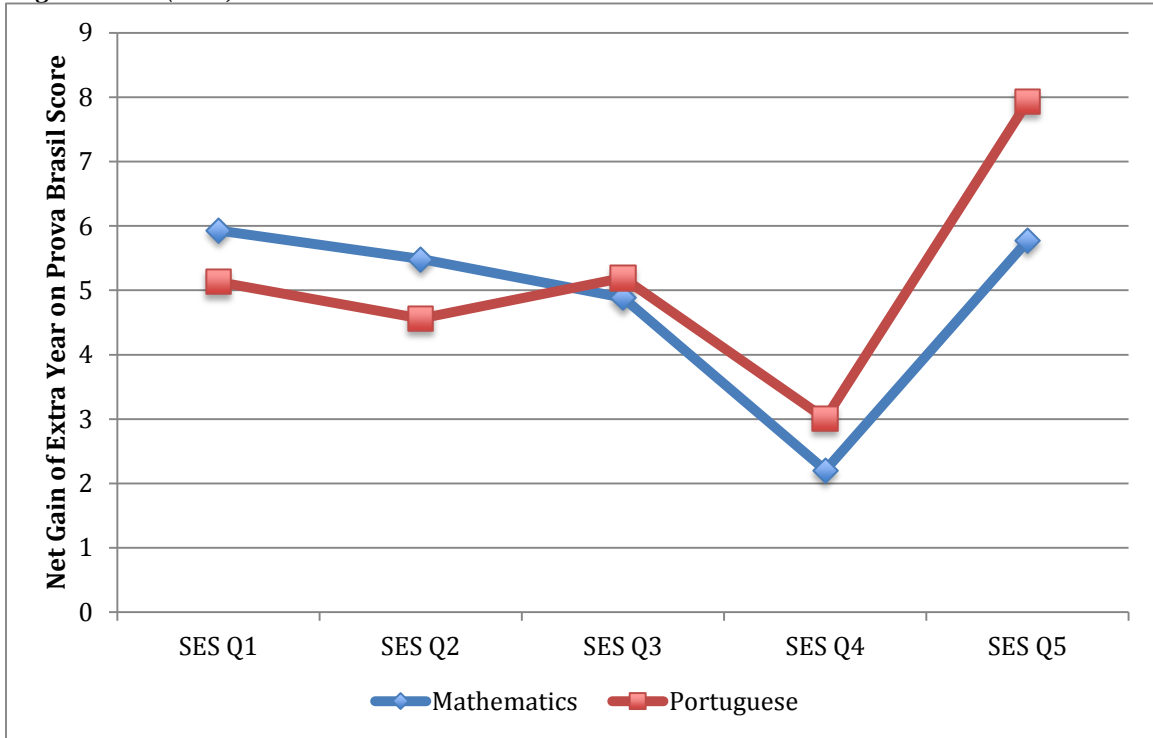
**Figure 1. Brazil: Primary and Secondary Level the Educational System Before and After the 2006 Educational Reform**

	Grades	Age		Grades
Early Childhood Education		0 years	Early Childhood Education	
		1 years		
		2 years		
		3 years		
		4 years		
		5 years		
Primary and Middle Schools	Grade 1	6 years	Primary and Middle Schools	Grade 1
	Grade 2	7 years		Grade 2
	Grade 3	8 years		Grade 3
	Grade 4	9 years		Grade 4
	Grade 5	10 years		Grade 5
	Grade 6	11 years		Grade 6
	Grade 7	12 years		Grade 7
	Grade 8	13 years		Grade 8
High School		14 years	High School	Grade 9
		15 years		
		16 years		
		17 years		

 Compulsory education

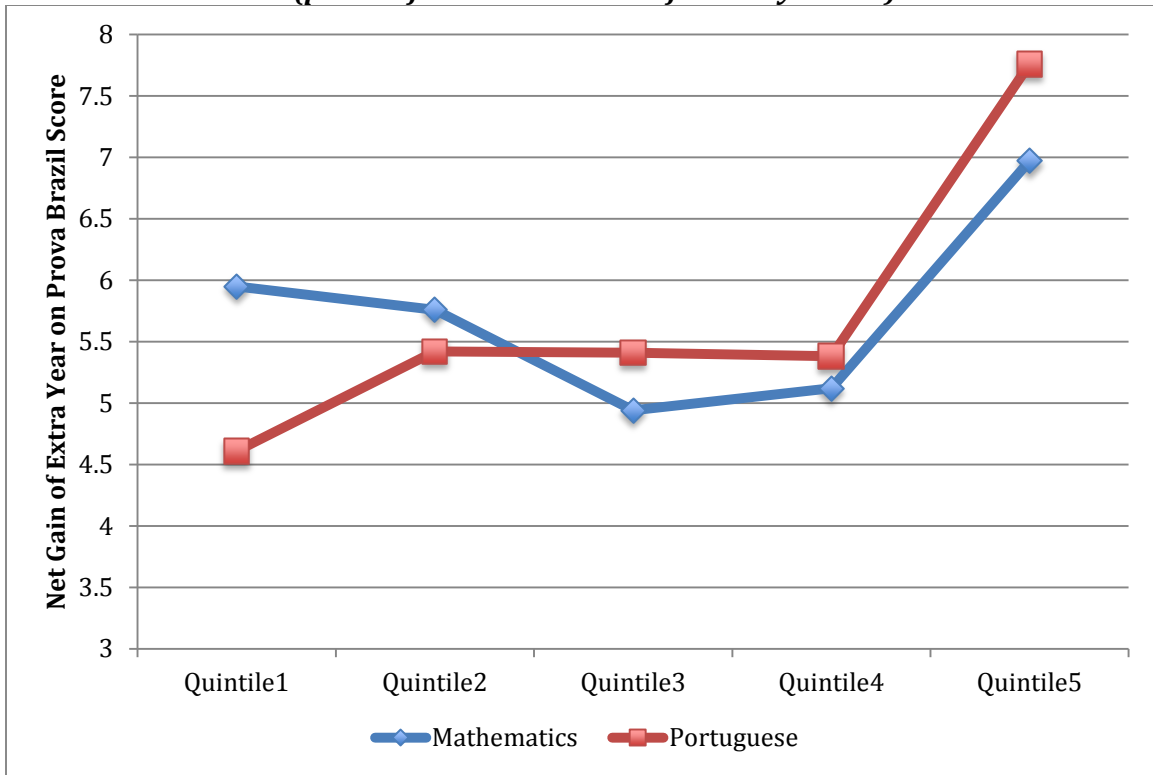
Source: Ministerio da Educação, 2007.

**Figure 2. Brazil: Estimated Difference-in-Difference-in Difference of Additional Year of Primary Education on Student Achievement, Pre-Treatment 2007, Post-Treatment 2011, by Quintile of Percent of Students in School with Mother's Education Greater than or Equal to High School (SES).**



Source: Authors' estimates from *Prova Brasil*, Final Year Primary School Test, 2007, 2009, 2011; *Censo Escolar*, 2007. The sample of schools used to estimate regressions in this table is restricted to schools in which students took 4<sup>th</sup> or 5<sup>th</sup> grade and 8<sup>th</sup> grade *Prova Brasil* tests in 2007, 2009, and 2011.

**Figure 2. Brazil: Quintile Regression of Difference-in-Difference-in Difference of Additional Year of Primary Education on Student Achievement, Pre-Treatment 2007, Post-Treatment 2011 (points of Prova Brasil End of Primary School)**



Source: Authors' estimates from *Prova Brasil*, Final Year Primary School Test, 2007, 2009, 2011; *Censo Escolar*, 2007. The sample of schools used to estimate regressions in this table is restricted to schools in which students took 4<sup>th</sup> or 5<sup>th</sup> grade and 8<sup>th</sup> grade *Prova Brasil* tests in 2007, 2009, and 2011.