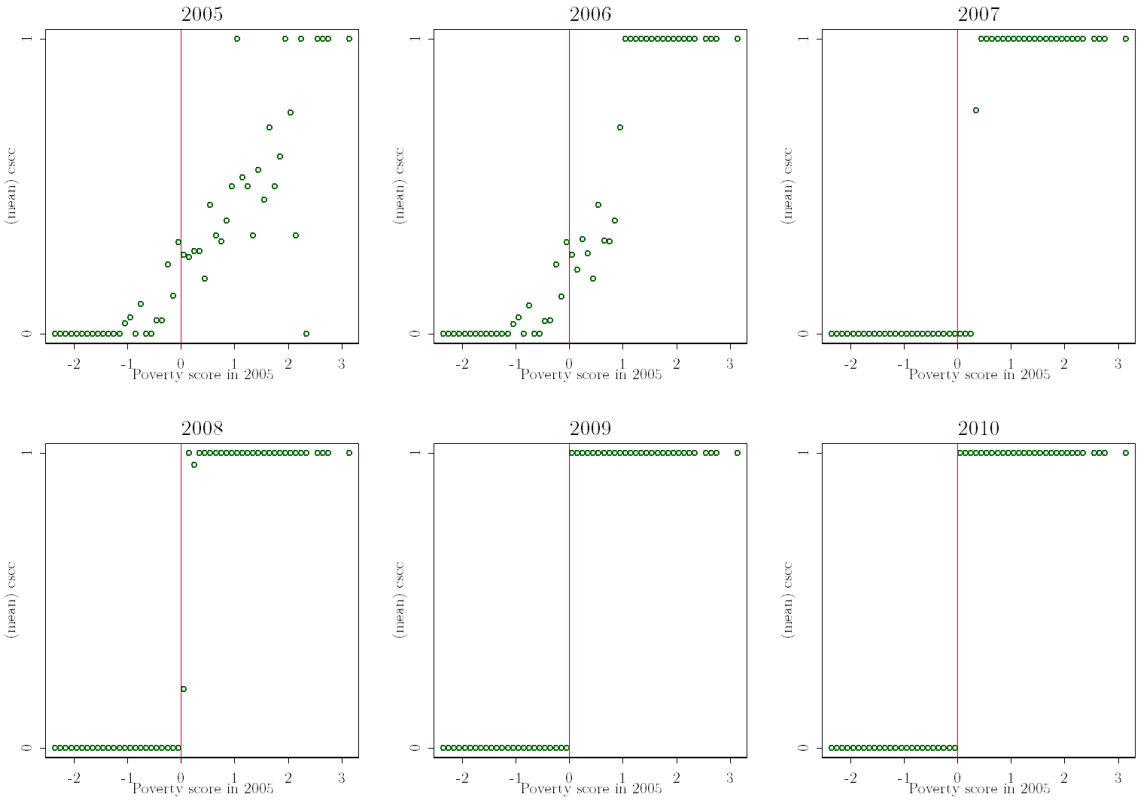
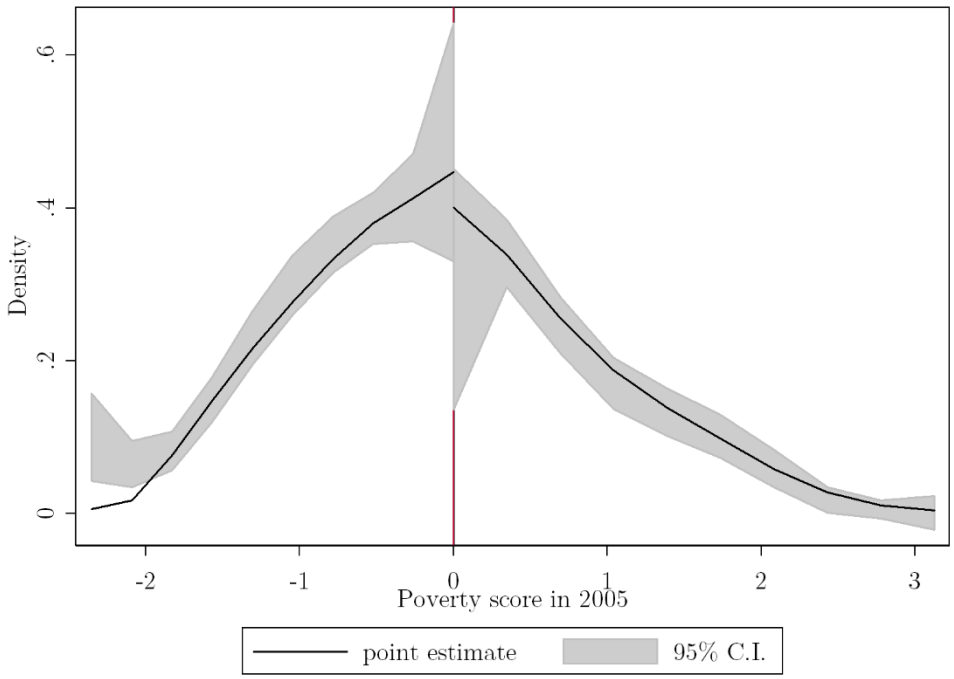
Online **Appendix Figures and Tables**

Figure A.1 Participation of schools in the CSCC-program by poverty score 2005-2010



Notes: These figures show program participation between 2005 and 2010 by score on the poverty index. Schools with poverty scores above zero are eligible for the program. Each dot represents the mean of the dependent variable (program participation) for schools located within a bin of width 0.1 of the poverty score.

Figure A.2 Density of the forcing variable across the cut-off for program eligibility



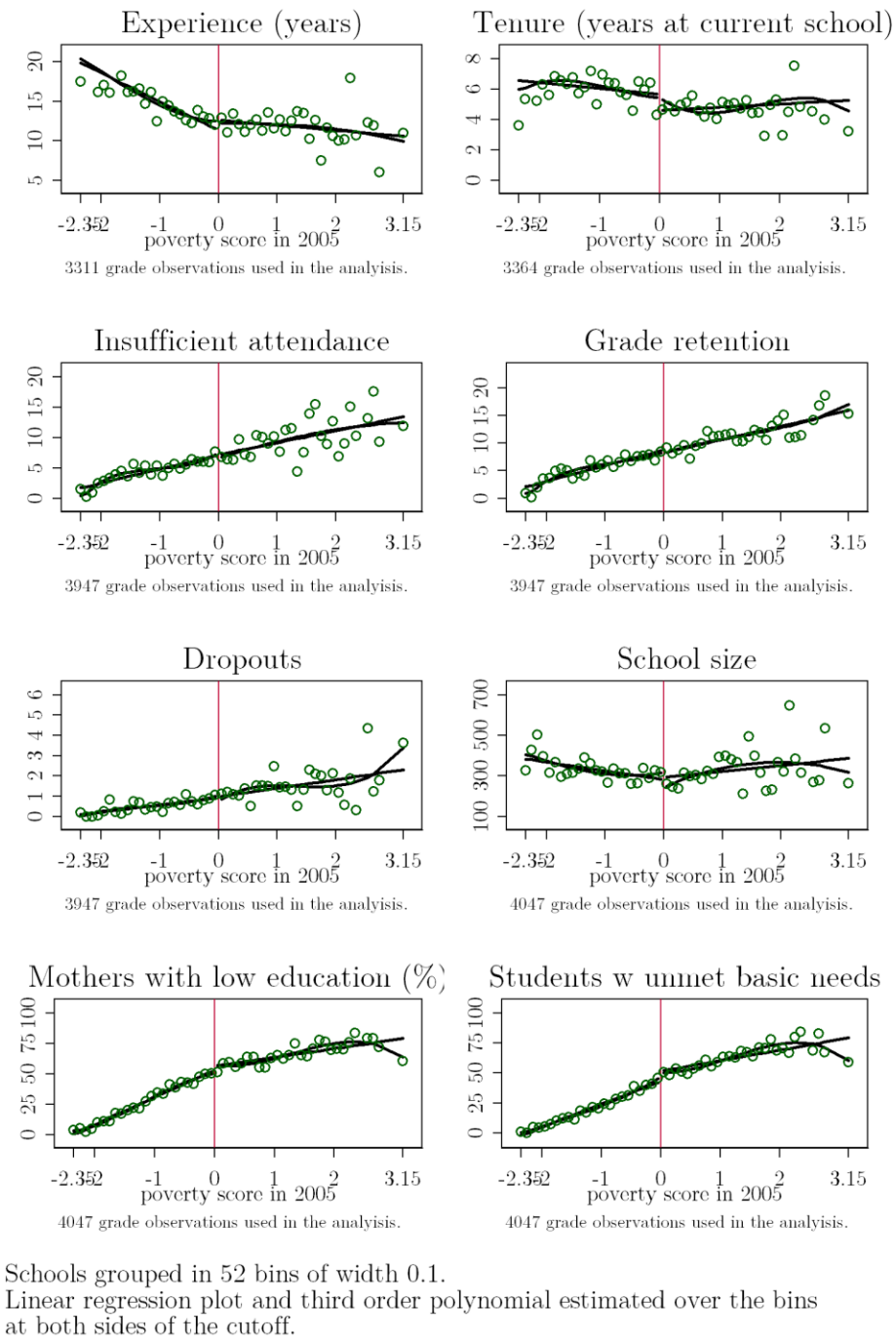
Manipulation tests:

1. Conventional T=-0.61 P-value (0.54)

2. Robust T=-1.64 P-value (0.10)

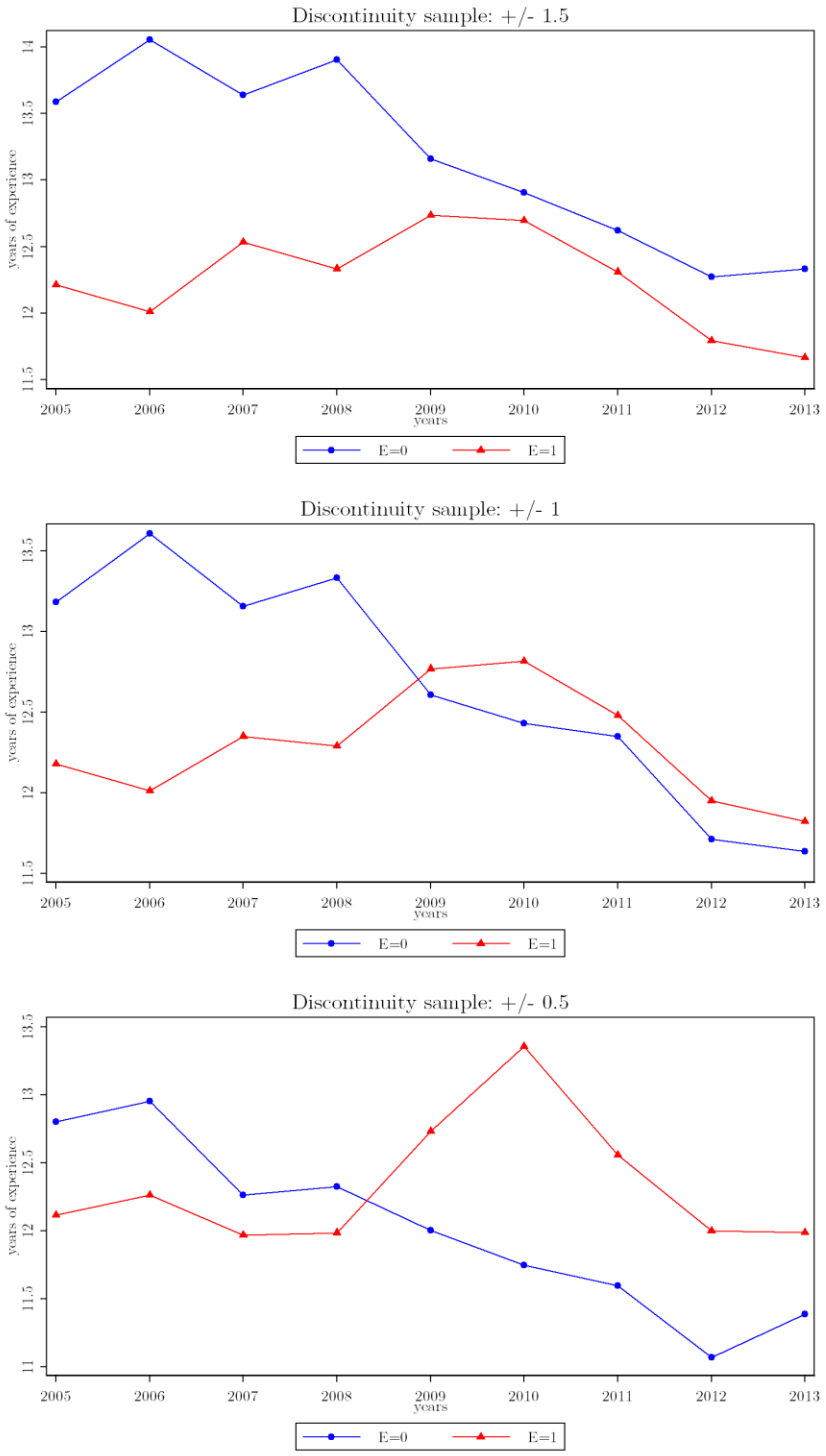
Note: The figure shows the density of the forcing variable across the cutoff. The test for the maninpulation across the cut-off use the methods by Cattaneo, Jansson and Ma (2017).

Figure A.3 Balancing tests for pre-treatment outcomes and characteristics in 2005



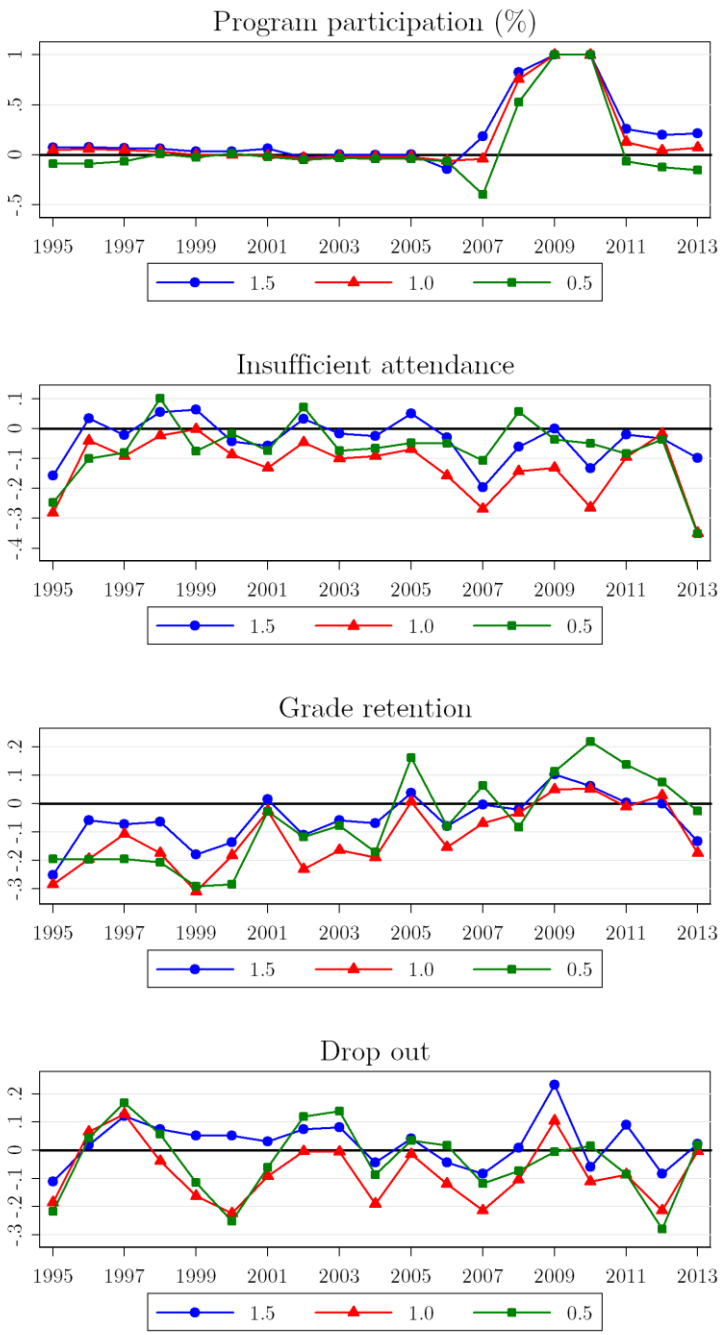
Notes: Each dot in the figure represents the mean of pre-treatment outcomes or covariates for schools located within a bin of width 0.1 of the poverty score. The figures use a linear and cubic fit for the regression lines at both sides of the cut-off for eligibility for the program.

Figure A.4 Teacher experience 2005-2013 for three discontinuity samples



Notes: The figures show the mean of teacher experience for schools that are eligible for the CSCC-program and schools that are not eligible for the period 2005-2013 and for three discontinuity sample around the cut-off.

Figure A.5 Differences in program participation, insufficient attendance, grade retention and drop out for schools at the cut-off using three discontinuity samples 1995-2013



Notes: The figures show point estimates from regression-discontinuity models with a linear specification of the forcing variable and controlling for grade, year and a quadratic of school size. The three discontinuity samples used are +/- 1.5, +/- 1.0 and +/- 0.5 points of the running variable.

Table A.1 Teachers' salaries (base plus additional salary)

	Payment Categories		
Year	#1	#4	#7
1997	9,365	11,235	16,827
1998	9,453	11,346	17,004
1999	10,787	12,144	18,242
2000	10,697	12,044	18,090
2001	10,494	11,814	17,746
2002	11,101	12,519	18,300
2003	8,990	10,138	14,819
2004	8,983	10,186	14,784
2005	9,230	10,424	14,512
2006	9,728	11,033	15,389
2007	10,441	11,927	16,746
2008	11,760	13,568	19,221
2009	12,777	14,918	21,201
2010	13,001	15,182	21,593

Notes: Teacher salaries by year and payment category. The payment scale includes seven categories. A new teacher starts in category #1 and moves to category #2 after four years. Hence, after 12 years of work, she can reach the 4th category: this is equal to an increase of 15% in her base salary. The columns show nominal wage (with food complements) for 20hs teachers in Levels 1, 4 and 7 of the payment scale, in constant Uruguayan pesos of February 2011. Data from January in each year. Source: Area de Estadística y Análisis- Dirección Sectorial de Programación y Presupuesto - CODICEN- ANEP

Table A.2 Estimates of the effect of being eligible for the CSCC-program on the use of non-salary components

	(1)	(2)	(3)	(4)	(5)	(6)
Non-salary component	% kids having lunch at school	has library room	computers for educational use	Number of computers	study books per capita - 1st grade	School has community teacher
Program eligibility	0.006	-0.066	0.145	0.612	-0.107	-0.016
	(0.065)	(0.132)	(0.125)	(0.830)	(0.315)	(0.127)
Poverty-index	0.425***	-0.173	-0.078	-1.095	-0.216	0.611**
	(0.157)	(0.314)	(0.306)	(1.733)	(0.815)	(0.299)
CSCC*Poverty-index	-0.565**	0.150	-0.224	-0.440	1.171	0.099
	(0.228)	(0.461)	(0.451)	(2.815)	(1.282)	(0.418)
Constant	0.624***	0.329***	0.690***	1.954***	1.227***	0.642***
	(0.040)	(0.085)	(0.083)	(0.451)	(0.234)	(0.081)
Observations	237	220	214	214	197	237
R-squared	0.059	0.016	0.007	0.005	0.005	0.141

Notes: Each column shows estimates of regression discontinuity models that regress a non-salary component on program eligibility and a linear specification of poverty score for both sides of the cut-off. The regression discontinuity models is specified as in Equation (1) in Section 4 using a discontinuity sample of 0.5 (schools with absolute poverty scores smaller than 0.5). Dates of measurement: students having lunch (2010), library (2008), computers (2009), study books (2011), community teachers (2010). Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Table A.3 Means of outcome variables 2005-2013 (discontinuity sample +/- 0.50)

Years		2005	2006	2007	2008	2009	2010	2011	2012	2013
Panel A: Teachers										
Experience (years)	Non elegible	12.8	13.0	12.3	12.3	12.0	11.7	11.6	11.1	11.4
	Elegible	12.1	12.3	12.0	12.0	12.7	13.4	12.6	12.0	12.0
Tenure (years)	Non elegible	5.6	5.3	5.3	5.3	5.0	4.6	4.5	4.0	4.5
	Elegible	4.8	5.0	4.7	4.9	5.0	4.9	4.8	4.4	4.8
Panel B: Students										
Insufficient attendance (%)	Non elegible	6.4	5.4	7.7	6.6	9.8	7.3	5.5	6.2	8.1
	Elegible	7.5	5.8	7.3	6.6	10.9	6.9	6.2	7.3	7.4
Grade retention (%)	Non elegible	7.7	8.1	7.7	6.3	5.9	5.8	5.7	5.4	5.7
	Elegible	8.7	8.1	8.1	6.7	6.9	6.2	5.7	5.9	4.9
Dropout (%)	Non elegible	0.8	0.9	1.1	0.9	1.2	1.0	0.8	1.1	0.6
	Elegible	1.1	0.9	1.1	0.9	2.7	1.0	1.1	1.0	0.8

Notes: Means of outcomes for teachers and students for 2005-2013

Table A.4 Estimates of the pre-treatment balance in 2005

Discontinuity sample	+/- 1.5	+/- 1.0	+/- 0.5
	(1)	(2)	(3)
Teacher Experience (in years)			
CSCC Program	-0,033	0,007	0,028
	(0.82)	(0.963)	(1.459)
Observations	2.796	2.113	1.211
Tenure (in years at current school)			
CSCC Program	-0,67	-0,34	-0,892
	(0.43)	(0.507)	(0.73)
Observations	2.856	2.168	1.234
Insufficient Attendance			
CSCC Program	0,247	-0,833	-0,898
	(0.704)	(0.832)	(1.171)
Observations	3.371	2.573	1.470
Grade Retention			
CSCC Program	0,074	-0,228	1,079
	(0.674)	(0.794)	(1.129)
Observations	3.371	2.573	1.470
Dropout			
CSCC Program	0,094	-0,141	-0,003
	(0.205)	(0.26)	(0.362)
Observations	3.371	2.573	1.470
School size (number of students in primary education)			
CSCC Program	-60.428**	-74.557**	-100.195**
	(27.817)	(32.038)	(43.929)
Observations	562	429	245
Mothers with primary education or less (%)			
CSCC Program	2,034	3.891*	1,311
	(1.796)	(2.075)	(2.845)
Observations	562	429	245
Children with unmet basic needs (%)			
CSCC Program	1,927	1,713	3,768
	(1.94)	(2.411)	(3.448)
Observations	562	429	245

Notes: Coefficients are obtained from regressions of the outcome or covariate in 2005 on the poverty score, an indicator for program eligibility, their interaction and grade dummies. CSCC-program is a dummy for program eligibility. Standard errors clustered at the school level. *** p<0.01, ** p<0.05, * p<0.1

Table A.5 Sensitivity analysis: reduced form estimates of the effect of the CSCC program on experience and tenure 2009-2013 (pooled data)

	Teacher experience			Tenure		
	(1)	(2)	(3)	(4)	(5)	(6)
Discontinuity sample	+/- 1.5	+/- 1.0	+/- 0.5	+/- 1.5	+/- 1.0	+/- 0.5
No controls						
1st-order	1.930***	2.011***	2.503***	0.371**	0.743***	0.611**
	(0.312)	(0.368)	(0.516)	(0.188)	(0.217)	(0.289)
2nd-order	2.256***	2.760***	4.181***	0.915***	0.560*	1.494***
	(0.463)	(0.567)	(0.773)	(0.258)	(0.309)	(0.388)
Cubic	2.571***	2.846***	4.551***	0.915***	1.237***	2.546***
	(0.603)	(0.718)	(0.963)	(0.333)	(0.389)	(0.450)
Local Polynomial						
1st-order	2.949***	3.711***	3.698***	1.592***	2.080***	2.159***
	(0.955)	(1.228)	(1.297)	(0.481)	(0.478)	(0.493)
2nd-order	3.959***	3.847***	3.522*	2.091***	2.227***	2.240***
	(1.370)	(1.483)	(1.842)	(0.577)	(0.581)	(0.614)
Additonal controls						
1st-order	1.658***	1.570***	1.706***	0.414**	0.761***	0.697**
	(0.302)	(0.356)	(0.505)	(0.190)	(0.219)	(0.289)
2nd-order	1.709***	2.134***	3.144***	0.997***	0.647**	1.532***
	(0.448)	(0.549)	(0.732)	(0.259)	(0.309)	(0.374)
Observations	13,749	10,341	5,868	13,878	10,441	5,920
Controlling for pre-treatment dependent						
1st-order	1.822***	1.709***	1.930***	0.551***	0.892***	0.907***
	(0.283)	(0.329)	(0.453)	(0.183)	(0.209)	(0.278)
2nd-order	1.792***	2.195***	3.497***	1.149***	0.784***	1.384***
	(0.408)	(0.494)	(0.661)	(0.249)	(0.298)	(0.373)
Observations	12,902	9,645	5,441	13,028	9,741	5,492
School level data						
1st-order	1.571***	1.356***	1.701***	0.329	0.671***	0.462
	(0.337)	(0.407)	(0.559)	(0.202)	(0.247)	(0.350)
2nd-order	1.523***	1.956***	2.237**	0.937***	0.544	1.079**
	(0.510)	(0.623)	(0.869)	(0.305)	(0.378)	(0.542)
Observations	2,482	1,881	1,075	2,495	1,892	1,08

Notes: Data used are at the grade level. Standard errors adjusted for clustering at the school X year level. Local Polynomial RD point estimators as developed in Calonico et al. (2014). Additional controls are 'mothers with primary education or less in 2005' and 'students with unmet basic needs in 2005'. Pre-treatment dependent for respectively experience or tenure are taken as most recent available from 2003-2005. ***, **, * statistically significant at the 1, 5 or 10 %-level.

Table A.6 Reduced form estimates of the effect of being eligible for the CSCC-program on teacher experience and tenure by year 2006-2013

	Teacher experience			Tenure		
Discontinuity sample	+/- 1.5	+/- 1.0	+/- 0.5	+/- 1.5	+/- 1.0	+/- 0.5
	(1)	(2)	(3)	(4)	(5)	(6)
year = 2006	-0.287	-0.038	-0.088	-0.153	0.450	0.213
	(0.810)	(0.961)	(1.355)	(0.501)	(0.585)	(0.840)
Observations	2,922	2,220	1,242	2,961	2,251	1,263
year = 2007	-0.475	-0.613	-0.478	-0.434	-0.198	-0.861
	(0.770)	(0.900)	(1.307)	(0.478)	(0.541)	(0.788)
Observations	2,933	2,249	1,270	2,955	2,262	1,283
year = 2008	-0.022	-0.492	-0.527	-0.309	0.025	-0.715
	(0.792)	(0.952)	(1.479)	(0.477)	(0.547)	(0.809)
Observations	2,971	2,235	1,261	2,996	2,254	1,279
year = 2009	1.228*	1.185	2.462**	-0.189	0.438	-0.118
	(0.738)	(0.878)	(1.243)	(0.445)	(0.501)	(0.663)
Observations	2,814	2,114	1,196	2,855	2,150	1,211
year = 2010	2.279***	2.640***	3.099***	0.340	0.832*	0.790
	(0.670)	(0.782)	(1.163)	(0.443)	(0.500)	(0.708)
Observations	2,949	2,224	1,262	2,974	2,245	1,275
year = 2011	1.712***	1.658**	2.235**	0.586	0.930*	0.816
	(0.634)	(0.745)	(0.986)	(0.405)	(0.479)	(0.640)
Observations	2,780	2,107	1,207	2,804	2,117	1,208
year = 2012	1.637**	1.248	0.815	0.778*	0.679	0.740
	(0.669)	(0.796)	(1.079)	(0.414)	(0.479)	(0.617)
Observations	2,732	2,067	1,155	2,749	2,082	1,160
year = 2013	1.483**	0.684	0.405	0.532	0.825*	1.225*
	(0.672)	(0.790)	(1.082)	(0.423)	(0.496)	(0.667)
Observations	2,474	1,829	1,048	2,496	1,847	1,066

Notes: Estimates from models using a linear specification of the forcing variable and controls for grade and a quadratic of school size. Data used are at the grade level. Standard errors adjusted for clustering at the school level. ***, **, * statistically significant at the 1, 5 or 10 %-level.

Table A.7 Reduced form estimates of the effect of being eligible for the CSCC-program on insufficient attendance of students by year 2006-2013

Discontinuity sample	+/- 1.5	+/- 1.0	+/- 0.5
	(1)	(2)	(3)
year = 2006	-0.028	-0.152	-0.048
	(0.072)	(0.093)	(0.123)
# Observations	3,365	2,567	1,470
year = 2007	-0.190**	-0.259**	-0.102
	(0.091)	(0.106)	(0.153)
# Observations	3,358	2,560	1,464
year = 2008	-0.059	-0.137	0.055
	(0.091)	(0.108)	(0.148)
# Observations	3,309	2,517	1,434
year = 2009	-0.000	-0.127	-0.035
	(0.124)	(0.148)	(0.215)
# Observations	3,252	2,475	1,409
year = 2010	-0.127	-0.255**	-0.048
	(0.097)	(0.119)	(0.169)
# Observations	3,238	2,464	1,403
year = 2011	-0.019	-0.092	-0.081
	(0.082)	(0.093)	(0.128)
# Observations	3,081	2,337	1,331
year = 2012	-0.032	-0.015	-0.035
	(0.095)	(0.111)	(0.145)
# Observations	2,985	2,265	1,278
year = 2013	-0.094	-0.337**	-0.339
	(0.148)	(0.166)	(0.228)
# Observations	2,732	2,036	1,178

Notes: Estimates from models using a linear specification of the forcing variable and controls for grade and a quadratic of school size. Data used are at the grade level. Standard errors adjusted for clustering at the school level. ***, **, * statistically significant at the 1, 5 or 10 %-level.

Table A.8 Reduced form estimates of the effect of being eligible for the CSCC program on grade retention by year 2006-2013

Discontinuity sample	+/- 1.5	+/- 1.0	+/- 0.5
	(5)	(6)	(7)
year = 2006	-0.092	-0.179*	-0.093
	(0.080)	(0.097)	(0.148)
# Observations	3,365	2,567	1,470
year = 2007	-0.004	-0.080	0.074
	(0.088)	(0.107)	(0.160)
# Observations	3,358	2,560	1,464
year = 2008	-0.025	-0.038	-0.097
	(0.090)	(0.111)	(0.180)
# Observations	3,309	2,517	1,434
year = 2009	0.121	0.058	0.134
	(0.081)	(0.098)	(0.142)
# Observations	3,257	2,477	1,410
year = 2010	0.073	0.061	0.256
	(0.089)	(0.107)	(0.165)
# Observations	3,238	2,464	1,403
year = 2011	0.003	-0.011	0.160
	(0.076)	(0.089)	(0.127)
# Observations	3,081	2,337	1,331
year = 2012	0.000	0.035	0.090
	(0.087)	(0.108)	(0.148)
# Observations	2,985	2,265	1,278
year = 2013	-0.154*	-0.202**	-0.030
	(0.081)	(0.098)	(0.135)
# Observations	2,736	2,040	1,180

Notes: Estimates from models using a linear specification of the forcing variable and controls for grade and a quadratic of school size. Data used are at the grade level. Standard errors adjusted for clustering at the school level. ***, **, * statistically significant at the 1, 5 or 10 %-level.

Table A.9 Reduced form estimates of the effect of being eligible for the CSCC program on the drop out by year 2006-2013

Discontinuity sample	+/- 1.5	+/- 1.0	+/- 0.5
	(9)	(10)	(11)
year = 2006	-0.043	-0.119*	0.018
	(0.052)	(0.067)	(0.082)
# Observations	3,364	2,566	1,470
year = 2007	-0.083	-0.214***	-0.118
	(0.064)	(0.079)	(0.092)
# Observations	3,356	2,558	1,463
year = 2008	0.008	-0.104	-0.072
	(0.062)	(0.068)	(0.082)
# Observations	3,309	2,517	1,434
year = 2009	0.233	0.105	-0.005
	(0.295)	(0.311)	(0.165)
# Observations	3,249	2,47	1,407
year = 2010	-0.059	-0.111	0.015
	(0.066)	(0.081)	(0.104)
# Observations	3,238	2,464	1,403
year = 2011	0.090	-0.086	-0.085
	(0.067)	(0.083)	(0.115)
# Observations	3,081	2,337	1,331
year = 2012	-0.083	-0.213***	-0.279***
	(0.071)	(0.082)	(0.090)
# Observations	2,985	2,265	1,278
year = 2013	0.023	-0.004	0.019
	(0.055)	(0.067)	(0.088)
# Observations	2,736	2,040	1,180

Notes: Estimates from models using a linear specification of the forcing variable and controls for grade and a quadratic of school size. Data used are at the grade level. Standard errors adjusted for clustering at the school level. ***, **, * statistically significant at the 1, 5 or 10 %-level.

Table A.10 Sensitivity analysis: reduced form estimates of the effect of the CSCC program on student outcomes 2009-2013

	Insufficient Attendance			Grade Retention			Drop Out		
Discontinuity sample	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	+/- 1.5	+/- 1.0	+/- 0.5	+/- 1.5	+/- 1.0	+/- 0.5	+/- 1.5	+/- 1.0	+/- 0.5
Cubic	-0.040	0.014	0.370**	0.079	0.082	0.155	-0.093	-0.174*	-0.019
	(0.094)	(0.113)	(0.144)	(0.083)	(0.102)	(0.136)	(0.057)	(0.099)	(0.089)
Local Polynomial									
1st-order	0.191	0.221	0.269	0.071	0.057	0.027	-0.029	0.011	0.109
	(0.171)	(0.184)	(0.186)	(0.130)	(0.164)	(0.209)	(0.069)	(0.085)	(0.101)
2nd-order	0.287	0.314	0.631***	0.102	0.065	0.020	-0.087	0.048	0.092
	(0.186)	(0.199)	(0.195)	(0.183)	(0.210)	(0.240)	(0.105)	(0.103)	(0.108)
Additonal controls									
1st-order	-0.045	-0.138**	-0.109	0.019	0.002	0.125*	0.036	-0.061	-0.070
	(0.046)	(0.054)	(0.076)	(0.038)	(0.046)	(0.067)	(0.057)	(0.058)	(0.047)
2nd-order	-0.241***	-0.124	0.055	-0.075	-0.007	-0.017	-0.082	-0.018	-0.152
	(0.070)	(0.085)	(0.113)	(0.059)	(0.074)	(0.106)	(0.057)	(0.057)	(0.131)
Observations	15288	11577	6599	15297	11583	6602	15289	11576	6599
Pre-treatment dependent as control									
1st-order	-0.063	-0.140***	-0.079	0.008	-0.008	0.111*	0.035	-0.057	-0.067
	(0.043)	(0.052)	(0.073)	(0.037)	(0.045)	(0.065)	(0.062)	(0.066)	(0.045)
2nd-order	-0.210***	-0.089	0.126	-0.084	-0.018	0.003	-0.078	-0.022	-0.155
	(0.067)	(0.081)	(0.110)	(0.058)	(0.072)	(0.103)	(0.061)	(0.055)	(0.140)
Observations	15,284	11,573	6,599	15,293	11,579	6,602	15,285	11,572	6,599
School level data									
1st-order	-0.056	-0.156***	-0.095	0.014	-0.006	0.132**	0.052	-0.061	-0.067
	(0.048)	(0.057)	(0.076)	(0.038)	(0.046)	(0.062)	(0.060)	(0.080)	(0.108)
2nd-order	-0.253***	-0.107	0.082	-0.082	-0.000	-0.008	-0.102	-0.057	-0.153
	(0.073)	(0.087)	(0.119)	(0.057)	(0.070)	(0.097)	(0.091)	(0.122)	(0.168)
Observations	2,552	1,933	1,101	2,552	1,933	1,101	2,552	1,933	1,101

Notes: see Table A.5.

Table A.11 Estimates of the effect of the CSCC program on student outcomes by grade 2009-2013

Grades 1-2	**Insufficient Attendance**			**Grade Retention**			**Drop Out**		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Discontinuity sample	+/- 1.5	+/- 1.0	+/- 0.5	+/- 1.5	+/- 1.0	+/- 0.5	+/- 1.5	+/- 1.0	+/- 0.5
Reduced form									
1st-order polynomial	-0.111*	-0.235***	-0.167	-0.091	-0.110	0.091	0.071	-0.106	-0.038
	(0.065)	(0.075)	(0.103)	(0.064)	(0.076)	(0.105)	(0.073)	(0.083)	(0.072)
2nd-order polynomial	-0.390***	-0.273**	0.013	-0.212**	-0.058	-0.207	-0.134	0.027	-0.039
	(0.096)	(0.115)	(0.156)	(0.095)	(0.114)	(0.162)	(0.092)	(0.112)	(0.165)
IV-estimates									
1st-order polynomial	-0.201*	-0.487***	-0.458	-0.163	-0.227	0.254	0.124	-0.215	-0.104
	(0.117)	(0.162)	(0.292)	(0.115)	(0.159)	(0.288)	(0.130)	(0.172)	(0.200)
2nd-order polynomial	-0.960***	-0.847**	-0.009	-0.526**	-0.179	-0.774	-0.321	0.059	-0.172
	(0.268)	(0.387)	(0.625)	(0.245)	(0.344)	(0.745)	(0.233)	(0.338)	(0.657)
Observations	5,100	3,862	2,200	5,100	3,862	2,200	5,098	3,861	2,199
Grades 3-6									
Reduced form									
1st-order polynomial	-0.022	-0.112**	-0.055	0.067*	0.045	0.152**	0.024	-0.032	-0.081*
	(0.044)	(0.053)	(0.075)	(0.035)	(0.043)	(0.062)	(0.062)	(0.066)	(0.047)
2nd-order polynomial	-0.183***	-0.025	0.113	-0.016	0.031	0.091	-0.052	-0.036	-0.212
	(0.069)	(0.084)	(0.113)	(0.055)	(0.071)	(0.102)	(0.062)	(0.050)	(0.143)
IV-estimates									
1st-order polynomial	-0.042	-0.230**	-0.152	0.120*	0.098	0.415**	0.041	-0.064	-0.222*
	(0.080)	(0.112)	(0.207)	(0.062)	(0.090)	(0.175)	(0.112)	(0.138)	(0.134)
2nd-order polynomial	-0.449**	-0.095	0.421	-0.034	0.097	0.391	-0.123	-0.112	-0.841
	(0.181)	(0.253)	(0.476)	(0.138)	(0.211)	(0.417)	(0.156)	(0.153)	(0.652)
Observations	10,188	7,715	4,399	10,197	7,721	4,402	10,191	7,715	4,400

Notes: The models from Table 3 are now estimated separately for grade 1-2 and for grades 3-6. All specifications as in Table 3.

Table A.12 Estimates of the effect of the CSCC program on attendance 2009-2013

	All grades			Grades 1-2			Grades 3-6		
Discontinuity sample	+/- 1.5	+/- 1.0	+/- 0.5	+/- 1.5	+/- 1.0	+/- 0.5	+/- 1.5	+/- 1.0	+/- 0.5
Reduced form estimates									
1st-order polynomial	0.038	0.149**	0.111	0.063	0.210***	0.118	0.025	0.118**	0.107
	(0.053)	(0.059)	(0.072)	(0.063)	(0.072)	(0.092)	(0.053)	(0.059)	(0.071)
2nd-order polynomial	0.251***	0.123	-0.000	0.334***	0.175	0.081	0.210***	0.097	-0.041
	(0.071)	(0.085)	(0.122)	(0.090)	(0.107)	(0.149)	(0.070)	(0.084)	(0.121)
IV-estimates									
1st-order polynomial	0.070	0.306**	0.303	0.116	0.433***	0.322	0.046	0.242*	0.294
	(0.095)	(0.126)	(0.204)	(0.114)	(0.156)	(0.259)	(0.095)	(0.125)	(0.202)
2nd-order polynomial	0.617***	0.391	0.036	0.821***	0.551	0.356	0.514***	0.310	-0.124
	(0.195)	(0.268)	(0.478)	(0.249)	(0.342)	(0.617)	(0.187)	(0.259)	(0.475)
Observations	15,297	11,583	6,602	5,100	3,862	2,200	10,197	7,721	4,402

Notes: The dependent variables ‘attendance’ is constructed from ‘insufficient attendance’, ‘dropout’ and additional information about the number of days that students attended school. Estimates are from models using a linear specification of the forcing variable. All models controls for grade and year. Data used are at the grade by year level. Standard errors adjusted for clustering at the school level. ***, **, * statistically significant at the 1, 5 or 10 %-level.

Table A.13 Estimates of the effect of the CSCC program on Math and Language Test Scores in 1999 and 2002

	(1)	(2)	(3)	(4)	(5)	(6)
Discontinuity sample	+/- 1.5	+/- 1.0	+/- 0.5	+/- 1.5	+/- 1.0	+/- 0.5
Math		**1999**			**2002**	
1st-order polynomial	0.109	0.158	0.375*	0.223	0.251	0.572
	(0.126)	(0.138)	(0.195)	(0.190)	(0.232)	(0.354)
2nd-order polynomial	0.220	0.233	0.316	0.378	0.527	0.459
	(0.165)	(0.190)	(0.313)	(0.301)	(0.371)	(0.439)
Observations	3,681	3,074	1,739	3,555	2,691	1,491
Schools	111	91	52	121	92	53
Language		**1999**			**2002**	
1st-order polynomial	-0.003	0.007	0.177	0.190	0.193	0.417
	(0.126)	(0.146)	(0.224)	(0.171)	(0.202)	(0.296)
2nd-order polynomial	0.036	-0.061	-0.172	0.284	0.408	0.545
	(0.181)	(0.229)	(0.332)	(0.254)	(0.308)	(0.404)
Observations	3,691	3,077	1,750	3,552	2,687	1,488
Schools	111	91	52	121	92	53

Notes: Reduced form models have been estimated for 1999 and 2002. These models regress the outcome variable on program eligibility since 2005. All models control for age and gender. The discontinuity samples (+/- 1.5; +/- 1.0; +/- 0.5) are based on standard deviations of the poverty score across the cut-off. Standard errors adjusted for clustering at the school level. ***, **, * statistically significant at the 1, 5 or 10 %-level.

Table A.14 Reduced form estimates of the effect of the CSCC program on student outcomes 2009-2013 for schools with many or little teachers with less than 4 years of tenure in 2005 (above or below median proportion of teachers with little tenure)

	Insufficient Attendance			**Grade Retention**			**Drop Out**		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Discontinuity sample	+/- 1.5	+/- 1.0	+/- 0.5	+/- 1.5	+/- 1.0	+/- 0.5	+/- 1.5	+/- 1.0	+/- 0.5
All grades									
Schools with above median %	-0.282***	-0.390***	-0.248**	-0.124**	-0.156**	-0.006	-0.087*	-0.176***	-0.126*
	(0.071)	(0.083)	(0.106)	(0.054)	(0.062)	(0.084)	(0.048)	(0.049)	(0.064)
Observations	6,241	5,12	3,232	6,246	5,124	3,234	6,239	5,117	3,231
Schools with below median %	0.152**	0.048	0.128	0.152**	0.145*	0.296***	0.038	-0.018	0.001
	(0.072)	(0.085)	(0.127)	(0.060)	(0.075)	(0.113)	(0.039)	(0.045)	(0.057)
Observations	7,621	5,295	2,728	7,625	5,297	2,729	7,624	5,297	2,729
Grades 1-2									
Schools with above median %	-0.388***	-0.525***	-0.412***	-0.266***	-0.300***	-0.039	-0.026	-0.209**	-0.070
	(0.098)	(0.111)	(0.141)	(0.087)	(0.099)	(0.133)	(0.074)	(0.087)	(0.107)
Observations	2,082	1,708	1,078	2,082	1,708	1,078	2,081	1,707	1,077
Schools with below median %	0.125	-0.002	0.148	0.087	0.123	0.308*	0.039	-0.061	0.036
	(0.098)	(0.116)	(0.167)	(0.095)	(0.117)	(0.169)	(0.063)	(0.080)	(0.093)
Observations	2,541	1,765	909	2,541	1,765	909	2,54	1,765	909

Notes: Student outcomes are regressed on eligibility for the program since 2005. The first rows only include schools that had many teachers with less than four years of tenure in 2005. The next rows only include schools that had little teachers with less than four years of tenure in 2005. All models control for grade, year and a quadratic of school size, and use a first order polynomial of poverty score. Data used are at the grade by year level. The three discontinuity samples (+/- 1.5; +/- 1.0; +/- 0.5) are based on standard deviations of the poverty score across the cut-off. Standard errors adjusted for clustering at the school X year level. ***, **, * statistically significant at the 1, 5 or 10 %-level.

Table A.15 Estimates of the effect of the CSCC program on tenure and experience at other schools

	Tenure			Experience at other schools		
	(1)	(2)	(3)	(4)	(5)	(6)
Discontinuity sample	+/- 1.5	+/- 1.0	+/- 0.5	+/- 1.5	+/- 1.0	+/- 0.5
Reduced form						
1st-order polynomial	0.403**	0.737***	0.657**	1.254***	0.819***	1.188***
	(0.191)	(0.220)	(0.297)	(0.248)	(0.298)	(0.435)
2nd-order polynomial	0.989***	0.640**	1.477***	0.728*	1.573***	1.726***
	(0.261)	(0.314)	(0.387)	(0.381)	(0.472)	(0.662)
Observations	13,878	10,441	5,920	13,749	10,341	5,868
Schools	543	413	235	543	413	235

Notes: Experience has been decomposed in 'tenure' and 'experience at other schools'. Each experience component has been regressed on program eligibility since 2005 using the same reduced form model as in Table 2. The estimates in columns (1) to (3) are similar to those in columns (4) to (6) of Table 2. Data used from 2009-2013. Standard errors adjusted for clustering at the school level. ***, **, * statistically significant at the 1, 5 or 10 %-level.

Table A.16. Estimates of the effect of experience components on student outcomes 2009-2013 (pooled data)

	Insufficient Attendance			Grade Retention			Drop Out		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1st-order polynomial	+/- 1.5	+/- 1.0	+/- 0.5	+/- 1.5	+/- 1.0	+/- 0.5	+/- 1.5	+/- 1.0	+/- 0.5
Total experience	-0.003***	-0.003**	-0.001	-0.001	-0.001	0.003	-0.000	-0.000	-0.001
	(0.001)	(0.001)	(0.002)	(0.001)	(0.001)	(0.002)	(0.001)	(0.002)	(0.001)
Tenure	-0.011***	-0.007***	-0.004*	-0.002	-0.001	0.002	-0.003*	-0.001	-0.003**
	(0.002)	(0.002)	(0.002)	(0.001)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Experience at other schools	0.003*	0.000	0.002	-0.001	-0.001	0.003	0.002	-0.000	0.001
	(0.002)	(0.002)	(0.002)	(0.001)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
2nd-order polynomial									
Total experience	-0.003***	-0.003**	-0.001	-0.001	-0.001	0.002	-0.000	-0.000	-0.001
	(0.001)	(0.001)	(0.002)	(0.001)	(0.001)	(0.002)	(0.001)	(0.002)	(0.001)
Tenure	-0.011***	-0.007***	-0.004*	-0.002*	-0.001	0.002	-0.003*	-0.001	-0.003**
	(0.002)	(0.002)	(0.002)	(0.001)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Experience at other schools	0.003*	0.001	0.002	-0.001	-0.001	0.002	0.001	0.000	0.001
	(0.002)	(0.002)	(0.002)	(0.001)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Fixed Effect models									
Total experience	-0.005***	-0.005***	-0.006***	-0.001	0.000	0.003*	-0.002	-0.002	-0.002
	(0.001)	(0.001)	(0.002)	(0.001)	(0.001)	(0.002)	(0.001)	(0.001)	(0.002)
Tenure	-0.011***	-0.010***	-0.013***	0.000	0.001	0.001	-0.002	-0.003	-0.005*
	(0.002)	(0.002)	(0.003)	(0.002)	(0.002)	(0.003)	(0.002)	(0.002)	(0.003)
Experience at other schools	-0.001	-0.002	-0.001	-0.001	-0.001	0.004**	-0.002	-0.002	-0.001
	(0.002)	(0.002)	(0.002)	(0.001)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Observations	13,295	9,982	5,659	13,304	9,988	5,662	13,296	9,981	5,659

Notes: Student outcomes are regressed on total experience or on the two components (tenure, experience at other schools). All models controls for grade, year, a quadratic of school size and the forcing variable which is allowed to be different across the cut-off. Data used are at the grade by year level. Fixed effects models include fixed effects for grades within schools.

Table A.17 Estimates of the effect of the experience components on test scores in 2009

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Discontinuity sample	All	+/- 1.5	+/- 1.0	+/- 0.5	All	+/- 1.5	+/- 1.5	+/- 0.5
1st-order polynomial			**Math**				**Language**	
Total experience	0.009	0.004	0.015	0.014	0.003	0.002	0.006	0.005
	(0.008)	(0.009)	(0.010)	(0.016)	(0.006)	(0.007)	(0.008)	(0.013)
Tenure	0.039***	0.037**	0.061***	0.060*	0.025**	0.025**	0.039**	0.019
	(0.014)	(0.015)	(0.018)	(0.030)	(0.011)	(0.012)	(0.018)	(0.029)
Experience at other schools	-0.009	-0.019	-0.018	-0.015	-0.007	-0.009	-0.011	0.010
	(0.011)	(0.012)	(0.012)	(0.023)	(0.008)	(0.009)	(0.011)	(0.020)
2nd-order polynomial								
Total experience	0.009	0.006	0.012	0.006	0.004	0.003	0.003	-0.008
	(0.009)	(0.009)	(0.010)	(0.019)	(0.006)	(0.007)	(0.008)	(0.013)
Tenure	0.039***	0.037**	0.057***	0.075*	0.026**	0.026**	0.032*	0.023
	(0.014)	(0.015)	(0.018)	(0.043)	(0.011)	(0.012)	(0.017)	(0.035)
Experience at other schools	-0.009	-0.018	-0.020*	-0.016	-0.008	-0.007	-0.015	0.001
	(0.011)	(0.013)	(0.012)	(0.022)	(0.008)	(0.009)	(0.011)	(0.018)
Observations	3,108	2,366	1,263	690	3,389	2,577	1,387	741

Notes: Test scores are regressed on total experience or on the two components (tenure, experience at other schools). All models control for age and gender. The three discontinuity samples (+/- 1.5; +/- 1.0; +/- 0.5) are based on standard deviations of the poverty score across the cut-off. Standard errors are adjusted for clustering at the school level.

Table A.18 Reduced form estimates of the effect of the CSCC program on student enrolment 2009-2013

	(1)	(2)	(3)	(4)	(5)	(6)
Discontinuity sample	+/- 1.5	+/- 1.0	+/- 0.5	+/- 1.5	+/- 1.0	+/- 0.5
School size		**All grades**			**Grades 1-3**	
1st-order polynomial	9.135***	9.209***	3.057	4.716***	5.940***	3.623
	(3.000)	(3.353)	(4.747)	(1.789)	(2.046)	(2.883)
2nd-order polynomial	6.598	-4.749	-10.076	4.422*	-2.045	-4.773
	(4.528)	(5.262)	(8.259)	(2.682)	(3.200)	(4.868)
Observations	2,549	1,930	1,100	2,551	1,932	1,101
Student background		**Lunch (0-4), all grades**			**Supper (0-4), all grades**	
1st-order polynomial	-0.114*	-0.221***	-0.149	-0.058	-0.139	-0.335*
	(0.069)	(0.084)	(0.121)	(0.112)	(0.139)	(0.194)
2nd-order polynomial	-0.164	-0.013	0.168	-0.234	-0.507**	-0.532*
	(0.106)	(0.130)	(0.188)	(0.174)	(0.216)	(0.290)
Observations	2,416	1,838	1,061	2,32	1,776	1,026
Schools	543	413	235	543	413	235

Notes: The dependent variables are school size or student background characteristics (lunch or supper at school). These dependent variables are regressed on program eligibility using the same specifications as in Table 2. Standard errors in models for lunch and supper participation adjusted for clustering at the school X year level.

Appendix A Primary education in Uruguay and the history of the CSCC program

The public education system in Uruguay has approximately 2,000 primary schools. Public schools are grouped in 5 main categories: Rural (*Escuelas Rurales*), Standard Urban (*Urbanas Comunes*), CSCC (*Contexto Socio Cultural Crítico*), Double Shift (*Tiempo Completo*) and Practice (*Habilitadas de Práctica y Práctica*). In Table A.19 we show the number of schools in each category since 1992. Rural Schools are very small schools located in the countryside. Although they are the majority of school facilities (56%), they cover a very small fraction of students (7.2% in the period under analysis). The typical rural schools has on average only 1.4 teachers in charge of the 6 grades of primary education, and has on average 18 students aged 6 to 12 years old. The majority of Uruguayan primary school students attend Standard Urban schools (Section 2). These Standard Urban schools could receive the extra resources from the program. The number of Standard Urban schools has steadily decreased, from 792 schools in 1992 to 400 in 2010. The same building facility of the Standard Urban school was used to implement one of the other types of schools that started to operate in that decade: CSCC schools, Double Shift and Practice.

The CSCC program started to operate in 1995. Between 1995 and 1999 it was called *Requerimiento Prioritario*; from that year until 2011 it was named *Contexto Socio Cultural Crítico*. Since 2011 the compensation program for poor schools is named A.PR.EN.D.E.R. (in Spanish means "to learn"), and is an acronym for *Atención Prioritaria en Entornos con Dificultades Estructurales Relativas*. The assignment criteria for the program have changed during the years. However, the goal of the program remained unchanged; compensating students with a disadvantaged family background.

In the year 1995 the first 155 schools started to participate in the CSCC Program (Table A.19). The majority (147) were schools that were already functioning as *Standard Urban* when they entered the program. In that first year of operation, schools were assigned based on school indicators of poor performance (i.e. grade retention) and characteristics of the houses in the neighbourhood were each school was located (based on information from census from the

National Institute of Statistics). This first allocation of schools didn't use direct measures of socioeconomic characteristics of the students attending the schools that were going to be treated.

Table A.19 School and students by type of primary school in Uruguay 1992-2013

Year	Type of School											
	Standard Urban		Rural		CSCC		Double Shift		Practice		TOTAL	
	Schools	Students	Schools	Students	Schools	Students	Schools	Students	Schools	Students	Schools	Students
1992	792	274,956	1,246	28,390	-	-	-	-	-	-	2,038	303,346
1993	787	271,990	1,237	27,236	-	-	39	4,106	-	-	2,063	303,332
1994	789	271,922	1,320	31,004	-	-	40	4,813	-	-	2,149	307,739
1995	651	223,658	1,307	30,881	155	51,291	46	6,552	-	-	2,159	312,382
1996	653	232,336	1,275	31,379	151	51,755	49	7,848	-	-	2,128	323,318
1997	636	231,138	1,240	27,514	149	54,220	58	9,418	-	-	2,083	322,290
1998	677	248,982	1,214	24,823	156	56,440	57	9,492	-	-	2,104	339,737
1999	507	173,639	1,183	23,066	273	107,819	66	11,875	-	-	2,029	316,399
2000	555	167,036	1,095	18,807	271	110,333	75	15,217	-	-	1,996	311,393
2001	718	236,610	1,094	18,686	106	43,540	84	18,869	90	41,183	2,092	358,888
2002	676	233,582	1,098	19,392	140	49,530	92	21,419	84	38,685	2,090	362,608
2003	631	214,804	1,089	19,985	151	55,412	95	22,451	114	51,892	2,080	364,544
2004	602	205,394	1,089	20,101	148	54,366	102	24,900	133	60,487	2,074	365,248
2005	592	200,035	1,092	20,282	150	54,345	104	25,160	135	60,296	2,073	360,118
2006	495	179,129	1,146	24,132	185	67,290	109	26,528	132	58,107	2,067	355,186
2007	463	158,537	1,143	23,534	221	86,166	111	26,256	126	53,547	2,064	348,040
2008	406	138,898	1,137	23,384	280	102,123	120	28,945	115	48,074	2,058	341,424
2009	395	132,817	1,142	23,486	285	101,438	132	31,359	114	46,881	2,068	335,981
2010	400	130,005	1,133	21,902	285	98,171	134	31,313	115	46,396	2,067	327,787
2011	383	121,577	1,132	21,136	271	96,476	157	34,937	117	45,849	2,060	319,975
2012	366	112,839	1,131	20,788	271	94,178	170	36,885	127	47,918	2,065	312,608
2013	329	104,226	1,107	19,429	265	90,543	188	40,400	129	48,060	2,018	302,658

Authors own calculations based on Monitor Educativo Educación Primaria (ANEP)

The program had an expansion between 1998 and 1999 and the program reached 273 schools. In the 1999 reallocation, schools entered or left the program based on three indicators: grade retention, insistences of students in 1st grade, and the percentage of students in 6th grade whose mothers had primary education as the highest level of formal education (with data from 1996) (ANEP 2005).

In 2001 the program was reduced to 106 schools. In the 2002 reallocation, the program had a 32% net increase in the number of schools participating, when 85 new schools joined the program (80% increase considering the schools in the previous year), and 51 schools were

dropped (48% of the schools in the previous year). The criteria used for the assignment to the CSCC program were based exclusively on socioeconomic variables of students. The variables used by the central authority were the percentage of children: (i) with unemployed household heads (or doing very informal jobs); (ii) whose mothers didn't achieve primary education; (iii) that were allowed to receive free lunch at school; and (iv) that lived in overcrowded houses. Each state in the country had a fixed slot of schools that were going to receive the extra resources, based on the number of students in the state and the percentage of children between 4 and 12 years old in the poorest quintile of the distribution of income (ANEP 2005)

From 2003 to 2005 the number of schools participating was around 150. In 2005 a new categorization of schools was made, and in the following years new schools entered the program, and others left because families living in the neighbourhoods in which they were located improved their socioeconomic status. The increase in the coverage rate of the program that started in 2006 ended in 2009, when 285 schools were receiving the extra resources, and the number of schools participating reached its maximum in 10 years. The 2005 re-categorization (schools moving in and out of the program) used indicators of human capital (level of education of mothers or, in her absence, the adult in charge of the children), socioeconomic level (unmet basic needs index), and an index of social integration. All this information was summarized (using factor analysis for data reduction) in a single measure that described the context of each school (cfr ANEP 2005). All the schools were then ranked according to this unique index, which is the forcing variable that we will use to perform the RD analysis. We focus our analysis on this period since the assignment to the program was fully transparent for these years. The eligibility rules changed again in 2011. Since then the assignment to the program was no longer based on the threshold of the poverty index from 2005.

Appendix B Identification issues

The main assumption in the regression discontinuity model is that all observed and unobserved factors should behave smoothly around the cutoff. To test this assumption we first look at the density of the forcing variable at the cutoff to investigate whether schools might have manipulated their assignment to the program. It should be noted that this type of manipulation is not very likely as the assignment to the program is completely determined by the central authority (see Section 2). Figure A.2 shows the density of the forcing variable across the cutoff based on the methods by Cattaneo, Jansson and Ma (2017). If schools would have manipulated their eligibility for treatment we would expect a larger density at the right side of the cutoff. However, we don't observe this in the data. If anything, the density appears to be slightly, but statistically insignificant, higher at the left side of the cutoff. Both the conventional test as the robust bias-corrected test yield statistically insignificant results. Hence, these tests don't indicate that the assignment to the program has been manipulated.

As a second test we perform balancing tests of covariates and outcomes in the baseline year (2005). Figure A.3 shows the results of these tests for the outcomes in 2005 and several covariates. Table A.4 in the appendix shows the balancing tests using three discontinuity samples around the cutoff. These tests suggest that schools on both sides of the cut-off were very similar on teacher and student outcomes in 2005; we only observe a difference in school size.

A further concern with our empirical analysis is that the program already exists since 1995. Differences in program participation in the years before the redesigning of the program might confound the estimates. If schools on either side of the cutoff received more resources from earlier program participation this might bias the results. To investigate this issue we have estimated Equation (1) for each year since 1995 using as dependent variable 'participation in the CSCC-program'. For the whole period since 1995 we find that there were no differences in program participation at the cutoff that might confound our estimates. These results are shown in Figure 2 and Figure A.5.

Another concern with our empirical approach is that there might have been changes in the composition of students in schools across. Although the CSCC-program explicitly focused on changes in the teaching staff it might also have affected the targeted schools along other margins.

For instance, the hiring of more experienced teachers might have made these schools more attractive for students and their parents. An increase in school size might have reduced student performance through larger classes. Moreover, changes in the socioeconomic background of students might also have an impact on student performance. It should be noted that changes in the enrolment of students are limited by the application of fixed catchment areas in primary education in Uruguay. We investigate whether the CSCC-program had an impact on school size and on the socioeconomic background of students for the most relevant period of the program. We estimate the main models from the previous sections, and use as dependent variables school size and two indicators of socioeconomic background of students; proportions of students in need of lunch or supper at school. The need of lunch or supper at school indicates poverty at home; both variables have five categories: 0%, 0-24%, 25-49 %, 50-74 %, 75-100%, and are measured yearly at the school-level.

The top panel of Table A.18 shows the impact of being eligible for the program on school size. Note that in our specification we control for school size in 2005, which implies that the estimates measure the increase of schools size since the redesigning of the program. The estimates from models that use a linear specification of the forcing variable suggest a small increase in school size. The estimated effects of 3 to 9 students imply an increase of class size with 0.25 to 0.75 students as schools on average have 12 groups. The estimates that use a quadratic specification don't indicate an increase of schools. The bottom panel shows the effects on the proportions of students that need lunch or supper at school. We don't observe a clear pattern for the first indicator (lunch). The estimates for the second indicator suggest that the proportion of students in need of supper at school is somewhat smaller in schools that were eligible for the program. This suggests that the poverty rate of students in schools at the right side of the cutoff is somewhat lower than in schools at the left side of the cut-off. Hence, we don't find that the proportion of disadvantaged students has increased due to the program. These analysis on changes in enrolment of students don't provide evidence that the program affected the targeted schools along other margins in such a way that it could explain the modest results of the program.

Robustness analysis

For our main analyses we estimate models that include linear and quadratic specifications of the forcing variable. We investigate the robustness of the estimates to different specifications of the forcing variable. In particular, we use a cubic specification of the forcing variable and also use local polynomial Regression Discontinuity (RD) point estimators (first order and second order polynomials) with robust bias−corrected confidence intervals as developed in Calonico et al. (2014). In our main models we control for grade fixed effects, year fixed effects and, due to the balancing test, for school size (using a quadratic specification[1]). We also test the robustness of the results to including pre-treatment outcomes from the period before the redesigning of the program in 2005 and to including additional indicators of family background ('mothers with primary education or less', 'students with unmet basic needs'). As RD empirical results are often sensitive to the choice of the bandwidth, we show the results for different bandwidths. For our main estimates we use three discontinuity samples around the cut-off value of the forcing variable; schools within the ranges of 1.5, 1.0 and 0.5 standard deviations of the poverty score across the cut-off. Data-driven bandwidth selectors, as proposed in Calonico et al (2014) and Cattaneo et al. (2018), yield optimal bandwidths that correspond with the range of our discontinuity samples. The optimal bandwidth varies and depends on the bandwidth selector, the type of model (sharp or fuzzy regression discontinuity model), the model specification and the sample size.

As we have data for multiple years since 2005 we pool the data for the relevant years (and include year dummies) to improve the precision of our estimates. An advantage of having multiple years of data is that our estimates will be less sensitive to confounding factors related with implementation issues in the initial years. Schools and teachers might need some time to adjust their decision to the new rules of the program. Hendricks (2014) notes that teacher pay may have a direct effect on the quality of the school but it is not clear when there will be an

[1] A linear specification yields similar results.

effect on student outcomes. With our data we can investigate the effect of the program up till 2013[2].

Systematic differences in missing values between schools might bias the results. Our data are obtained from administrative registries and collected for administrative reasons which mitigates this concern. To probe the randomness of the missing values we have estimated our main regression models using a dummy for missing outcome variable as dependent variable. These analyses don't yield concerns about systematic differences in missing outcomes which might bias our results.

[2] It should be noted that we are not estimating 'long term effects' of the program in models in which year t outcomes are regressed on program participation in year t-1 or year t-2.