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APRENDER: Just a nice name for the most vulnerable schools?

por

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Contents

Abstract

The world has seen an increase in the average access to schooling in recent years, but this still hides big disparities in educational attainments. Family background remains a strong predictor of the educational outcomes of kids. In 2011, Uruguayan authorities created the APRENDER educational program, which aims to tackle learning difficulties in critical context schools with an integrated set of tools: monthly meetings between teachers, the provision of in-kind resources, and remedial education. This study aims to evaluate the effect of APRENDER on schooling trajectories and cognitive & socio-emotional outcomes. We exploit the change in the probability of being an eligible school along a continuous poverty index through an RDD. We find a significant and robust reduction in grade retention of about 2.3 percentage points for all six primary grades (ages 6 to 11). The effect rises if only the first three grades are considered. Additionally, we obtain a significant and robust positive impact of 0.31 standard deviations on Language Tests for third and sixth grades. When only including sixth grade, this effect is higher. This group also shows a positive and robust impact on Math scores. These effects on cognitive outcomes appear to be higher for females and students with the highest sociocultural background across the class group. Moreover, we find that in APRENDER schools, teachers are less likely to send homework and show higher levels of self-training in core subjects of the program. They also interact more frequently with children's families. Last, we find a positive effect on parents' beliefs about the future skills of their kids.

JEL No.: I38, J24

Keywords: Student Performance; Cognitive Tests; Socioemotional Tests; Disadvantaged Students; Teacher Collaboration; Education Production Function

Resumen

El mundo ha visto un aumento en el acceso promedio a la educación en los últimos años, pero esto aún esconde grandes disparidades en los logros educativos. El contexto familiar siguen siendo un fuerte predictor de los resultados educativos de los niños. En 2011, las autoridades uruguayas crearon el programa educativo APRENDER, que tiene como objetivo abordar las dificultades de aprendizaje en las escuelas de contexto crítico con un conjunto integrado de herramientas: reuniones mensuales entre docentes, la provisión de recursos y clases de apoyo a los alumnos rezagados. Este estudio tiene como objetivo evaluar el efecto de APRENDER en las trayectorias escolares y los resultados cognitivos y socioemocionales. Explotamos el cambio en la probabilidad de ser una escuela elegible a lo largo de un índice de pobreza continuo a través de un RDD. Encontramos una reducción significativa y robusta en repetición de alrededor de 2.3 puntos porcentuales para los seis grados de primaria (de 6 a 11 años). El efecto aumenta si sólo se consideran los tres primeros grados. Adicionalmente, obtenemos un impacto positivo significativo y robusto de 0.31 desviaciones estándar en las Pruebas de Lenguaje para tercero y sexto grado. Este efecto es mayor cuando solo se incluye sexto grado. Este grupo también muestra un impacto positivo y robusto en los resultados de Matemáticas. Estos efectos sobre los resultados cognitivos parecen ser mayores para las mujeres y los estudiantes con mejor contexto sociocultural en el grupo de clase. Además, encontramos que en las escuelas APRENDER, los docentes son menos propensos a enviar tareas domiciliarias y muestran mayores niveles de formación en las materias básicas del programa. También interactúan más frecuentemente con las familias de los niños. Por último, encontramos un efecto positivo en las creencias de los padres sobre las habilidades futuras de sus hijos.

JEL Nro.: I38, J24

Palabras Clave: Desempeño Estudiantil; Pruebas Cognitivas; Pruebas Socioemocionales; Estudiantes Desfavorecidos; Cooperación entre Maestros; Función de Producción de Educación

1 Introduction

Over the last decades, the world has experienced a considerable increase in kids' average access to schooling, both in primary and secondary school. In the case of primary school, access is nearly universal (World Bank, 2018). However, this average and steady improvement in schooling masks substantial heterogeneity in educational attainments. World Bank (2018) outlines that family background is a strong predictor of students' academic achievement. Closing the learning outcomes gap between pupils of different socioeconomic backgrounds remains a crucial challenge for several countries worldwide.

Different governments have implemented several interventions to face these educational deficits within the most vulnerable populations. Many of these interventions have demonstrated the capacity to improve the learning outcomes of vulnerable kids (McEwan (2015), Jacob and Ludwig (2008)). Moreover, long-run effects have also been found (Chetty et al. (2011), Heckman et al. (2013), Lavecchia et al. (2020)). Uruguay is not an exception: since the 1990s, authorities have designed different initiatives to improve the educational attainments of students from critical contexts (Cabrera and Webbink (2020), Cerdan and Vermeersch (2007), Llambí (2014)).

In this paper, we evaluate the impact of the APRENDER program on student performance, cognitive abilities, and socio-emotional outcomes. The APRENDER program, started in 2011, is a bundle of policies aiming to improve the learning outcomes of the most vulnerable students in Uruguay's public (urban) schools. Specifically, the APRENDER program implies: (1) increasing the number of teacher meetings, (2) providing in-kind resources to schools, and (3) adding special teachers to support the children with the weakest trajectories in the classroom. APRENDER assigns schools into the program based on a continuous poverty index constructed every five years by the *Administración Nacional de Educación Pública* (ANEP). The schools belonging to the first two quintiles of the poverty index enter the APRENDER program. The APRENDER target is primary school, which in Uruguay consists of six grades (ages 6 to 11).

We employ grade-yearly level data from the universe of public primary schools in Uruguay from 2007 to 2020, together with a novel national representative survey (*Aristas*) on primary schools measuring cognitive and socio-emotional outcomes at the student level. Armed with this dataset, we exploit the discontinuous change in the probability of being assigned to the APRENDER program to apply a Regression Discontinuity Design (RDD) (Cattaneo, Idrobo, and Titiunik (2020)). In other words, we define as treated those schools that belong to the

APRENDER program by a very short margin, while (urban) primary public schools just above the threshold constitute our control group. We restrict our analysis to non-overlapping time windows that correspond to different releases of the poverty index classifying schools.

Results Preview. Our analysis proceeds in three steps. First, we evaluate the effect of the program on different student outcomes: cognitive tests, socio-emotional scores, and schooling trajectories. We find a positive impact of APRENDER of 0.31 standard deviations on Language tests when jointly analyzing third and sixth grades. When evaluated separately, sixth graders benefit the most from the program: they show effects of 0.38 standard deviations on their Language scores and 0.48 on Math tests. No significant results appear for socio-emotional outcomes. Additionally, we document a significant reduction of 2.3 percentage points in grade retention for the last period analyzed when all primary grades are included. The effect is higher when we consider only grades from first to third. No significant effects arise for dropout and insufficient attendance.

Second, we document the existence of heterogeneous effects on academic results by gender and socio-cultural background. Female students experience an increase of 0.34 standard deviations in Math, while the effect for males is indistinguishable from zero. Moreover, although both groups show a significant positive impact on their Language tests, the effect is higher for females: 0.37 versus 0.28 standard deviations. On the other hand, pupils with the highest socio-cultural background within the classroom, as captured by *Aristas* index, obtain bigger improvements in Math scores (0.44 versus 0.25 standard deviations) with respect to the other students in their class.

Third, we conduct an exploratory analysis to shed light on the potential mechanisms at play. We examine the effect of APRENDER on intermediate outputs related to schools, teachers, students, and their families. In APRENDER schools, teachers are 80 percentage points more likely to be up-to-date in math and language, which are the core subjects of the program. Apart from that, they are approximately 20 percentage points less likely to send math and language homework, which outlines a change in their pedagogy. Also, APRENDER schools are 50 percentage points more likely to have monthly parent meetings. Last, there is a positive change in parents' beliefs about their kids, as they are 7 percentage points more likely to expect their children to reach a higher education level than themselves. There is no change in parents' investments in their kids' education. We interpret these results under the theoretical framework of an education production function.

When considering the policy implications of our results, it is relevant to keep three caveats

in mind. First, given that we estimate our effects through an RDD, our results correspond to local effects. We show that APRENDER is generating substantial impacts for the schools close to the treatment assignment cutoff, which are the least vulnerable among the treated ones. However, this methodology cannot produce causal treatment effects for poorer schools. Second, given that our estimates on academic tests, socio-emotional outcomes, and intermediate outcomes use data from a sample of schools, the number of effective schools used for the estimations is sometimes reduced. Third, the effects we estimate in this paper are joint effects of the three APRENDER initiatives. We cannot estimate the separate impact of each component under a causal framework.

The remainder of this study organizes as follows. Section 2 details the literature contribution of our paper. Section 3 describes the APRENDER program and the institutional background in detail. Section 4 describes the data used for this work. Section 5 presents descriptive statistics and graphical analysis. Section 6 explains the identification strategy for estimating the treatment effect. Section 7 discusses the estimated impacts on schooling trajectories and cognitive and non-cognitive outcomes. It also shows the different robustness checks performed. Section 8 evaluates the results of a heterogeneous effects analysis. Section 9 develops a mechanisms analysis. Finally, Section 10 concludes with final remarks. Appendixes at the end include tables complementary to the analysis presented in the main body of the text.

2 Related Literature

Our study contributes to several strands of the literature. First, this work connects with the literature that seeks to improve students' learning in vulnerable contexts. This literature has focused on the impact of traditional measures. Holland et al. (2015) and Cerdan and Vermeersch (2007) evaluated the impact of extending school time. Angrist and Lavy (1999) analyzed the effect of reducing class size. Glewwe et al. (2009) studied the impact of providing textbooks to schools, while Banerjee et al. (2007) evaluated the effect of remedial education. In this paper, we show that the initiatives from APRENDER improve students' learning, potentially through (1) raising the frequency of teacher meetings, (2) giving in-kind resources to schools, and (3) providing remedial education. While the second and third measures were previously reviewed in the literature, there is a lack of evidence concerning the effect of raising the number of teacher meetings. Although this study cannot identify the individual contribution of more frequent teacher meetings, our estimates suggest a joint impact of the three measures.

The closest paper to ours is Cabrera and Webbink (2020), investigating the effect of a previous Uruguayan educational program: *Escuelas de Contexto Crítico* (ECC). Although different, this program was the predecessor of APRENDER and was active until 2010[2]. Cabrera and Webbink (2020) were the first to exploit the discontinuity in treatment eligibility to implement an RDD. They tested the effect of ECC on teacher experience and student outcomes. Positive results appeared for teacher experience in treated schools, but they found no significant impact on schooling trajectories and cognitive outcomes. Our paper differs from their research in several ways. First, we provide novel evidence of the positive effects of APRENDER on cognitive scores, using the novel data from *Aristas* survey[3]. Second, we uncover sizeable heterogeneous effects at the pupils' level, which can give information about possible differences in the program's impact. Third, we perform a first exploration of the possible mechanisms behind the effect of APRENDER on different intermediate outcomes at the school, teacher, and family levels.

[2]Essentially, there are two main differences between the ECC program and APRENDER. First, as Cabrera and Webbink (2020) explain, the intention of the ECC program was mainly to attract more qualified teachers to the treated schools. On its part, APRENDER seeks to positively contribute to strengthening the school community and improving the interrelation with students and families. Second, the ECC program only included the enforcement of monthly teacher meetings among the three APRENDER components. The APRENDER reform added the initiatives of in-kind resources and special teachers to provide remedial education. APRENDER maintained the same assignment rule as the ECC program: given a continuous poverty index, the schools belonging to the first two quintiles are eligible for the program.

[3]This dataset also provides socio-emotional scores and characteristics of schools, teachers, families, and students.

Second, our paper contributes to the research that investigates the role of teachers' quality on student performance (Chetty et al. (2014), Chetty et al. (2014b), Hanushek and Rivkin (2006), Glewwe and Muralidharan (2015), McEwan (2015), Rivkin et al. (2005)). The economics of education literature has extensively studied ways to improve teacher quality in schools. For instance, Cabrera and Webbink (2020) evaluate whether increasing salaries would attract more experienced teachers. Duflo et al. (2015) study the impact of teachers' contract status on their performance. However, little is known about teacher motivation and collaboration's effects on teacher quality in this literature. A few studies (Kolleck (2019), Ramachandran et al. (2006), Vangrieken (2015)) have shown that teacher quality positively varies when teachers are more motivated. We add to this literature by focusing on how teacher quality can be affected by targeting teacher motivation and collaboration. We find an increase in teacher self-training and a change in pedagogy practices in the core subjects of APRENDER: math and language. We hypothesize that such changes are affected by teacher cooperation and knowledge interchange with other teachers, where their motivation should also be an effective channel (Kolleck (2019), Vangrieken (2015)).

Third, our work also relates to the literature concerning parents' beliefs and investments in their children. Several papers (Attanasio et al. (2020), Gould et al. (2020), Heckman and Mosso (2014)) have shown the importance of parents' investments in their kids to reduce gaps between children of different socioeconomic backgrounds. Recent literature speaks about the importance of parents' beliefs as a channel to modify their investments in their kids (List et al. (2021)). According to these findings, acting on parents' beliefs can be an effective way of modifying parental investments in their kids. We show that APRENDER positively impacts parents' expectations about the future skills of their kids. We hypothesize that the augmented frequency of school interactions with parents generates this effect (Islam (2018), Ganimian and Murnane (2014)). Our results also align with List et al. (2021) in that parents' investments stay the same when the change in parents' beliefs seems not to be sufficiently high.

3 Background

3.1 The Uruguayan Education System

In Uruguay, all kids must face a compulsory schooling trajectory composed of two stages: primary and secondary school. Both are composed of 6 grades coursed in the calendar year - from March to December. This paper focuses on primary school, as it is the target of the program we evaluate. Provided they are not retained in a specific grade, kids start primary school at 6 years old and begin sixth grade at 11 years old. Primary school is divided into two cycles of three grades each. Both cycles have different objectives and, therefore, a distinct emphasis on the learning process of students (ANEP, 2016b)[4]. In 2019, the number of students enrolled in primary school was 300,566, split into 2,471 centers (MEC, 2020).

Schooling can be provided by private centers or by the State. State Education is universal and free, and in 2019 enrolled 82.7% of the total primary school students. Schooling is highly concentrated in Montevideo, as 32.0% of students attended schools located there in 2019. Urban schools represented 95% of the public supply of primary education. The standard option within the urban schools is common urban schools (UC), which offer a pedagogical time of four hours[5] and represented 70.2% of the students attending urban schools in 2019. We analyze the impact of the APRENDER program, which selects a group of schools inside the UC category. In 2019, this program accounted for 43.5% of the students attending UC schools. (MEC, 2020)

3.2 The APRENDER school program

The APRENDER program provides the poorest students with additional educational support, selecting the schools with the most vulnerable contexts for implementation. The program is named after the combination of the first letters of *Atención Prioritaria en Entornos con Dificultades Estructurales Relativas*, which can be translated to Priority Attention in Environments with Relative Structural Difficulties. This combination of letters forms the Spanish translation of *learn*. The program is implemented by the *Administración Nacional de Educación Pública* (ANEP), one of Uruguay's highest educational authorities.

[4]The first cycle focuses on achieving basic skills such as reading, writing, and basic math and language comprehension. The second cycle extends the learnings from the first cycle, preparing students for secondary school.

[5]Other urban school types offer extended pedagogical time.

The following lines transpose the specific objectives of the program: *A.1. Promote educational activities that allow to reduce grade retention rates, decrease absenteeism and improve learning levels*[6]. *B.1. Promote the consolidation of teacher communities that generate relevant and pertinent educational projects in the management of knowledge of all children and members of the educational community, in a framework of institutional improvement. C.1. Improve interrelation with families through active participation of adult referents and strengthening of the school's bond with the community.* (CEIP, 2015)

The APRENDER school program was born in 2011 and is composed of three initiatives: (1) extending the number of teacher meetings, (2) providing in-kind resources to schools (PODES projects), and (3) adding special teachers to provide remedial education. *Salas Docentes* is the name given to teachers' meetings destined for discussing and coordinating the best practices and actions to implement with children. In the schools selected for the APRENDER program, these meetings are implemented monthly, contrary to the rest of UC schools, in which they take place twice a year. By compulsorily implementing a larger number of these meetings, authorities intend to multiply the coordination and mutual knowledge each teacher has about each other's work. Besides coordinating the different aspects and complexities of the school, *Salas Docentes* are also a space in which continuous teacher training is sought through the implementation of different courses and seminars.

The PODES initiative seeks to incentivize the development of individual school projects to attend to particular goals or challenges that they may have. Each school is encouraged to design and propose a specific project to the authorities in response to a particular difficulty it may face. If it is approved, economic aid for its implementation is granted. Every project must last for one year, with the option to renew it for an additional one. The size of the economic aid is predetermined and varies depending on the school size -number of enrolled students-. Specifically, in 2020 a school with the average number of students would receive an amount equivalent to USD 4.78[7] per student. This amount would be received as a one-time payment, corresponding to the entire year.

Third, *Trayectorias Protegidas* is an initiative that selects the students with the weakest trajectories of the group and provides them with remedial education. It is implemented for a specific period during the academic year and may be destined for students from specific grades.

[6]Regarding the improvement of learning levels, authorities mention that the program emphasizes two core subjects: math and language. These areas of knowledge are observed to be weak among the most socioeconomically vulnerable students.

[7]Taking into account the average exchange rate of Uruguayan Pesos for 2020, obtained from IMF web page (`https://data.imf.org/`)

Moreover, the APRENDER program is intended to be complementary to other school programs. Specifically, APRENDER is deeply linked with the *Maestros Comunitarios* program (PMC), which assigns special teachers whose role is strengthening the school's bond with the student's families. This is one of the main objectives of APRENDER, as one of the main difficulties in vulnerable contexts is the lack of involvement of the children's families. However, PMC teachers are not specific to the APRENDER schools, and both programs may not necessarily coincide in all schools.

All of these different components of the program share the common goal of transforming the school into a unified place where teachers, students, and their families interact in a positive way for students. This goal is particularly important given the reality of the most vulnerable Uruguayan schools, where dropout and absenteeism reach high levels.

Until 2010, a predecessor of APRENDER was active: the ECC program. In 2011 the Uruguayan educational authorities decided to replace the ECC program with the APRENDER program, trying to cover more aspects of the schools' reality. Essentially, there are two main differences between ECC and APRENDER. First, as Cabrera and Webbink (2020) explain, the intention of the ECC program was mainly to attract more qualified teachers to the treated schools[8][9]. On its part, APRENDER seeks to positively contribute to strengthening the school community and improving the interrelation with students and families. Second, the ECC program only included the enforcement of monthly teacher meetings among the three APRENDER components. The APRENDER reform added the initiatives of providing in-kind resources and special teachers for remedial education (this last initiative started to be implemented in 2013).

APRENDER maintained the assignment rule of the ECC program: according to a continuous poverty index, the schools belonging to the first two quintiles are eligible for the program. This poverty index comes from a periodized study from ANEP carried out every five years: *Relevamiento de Características Socioculturales* (CSC). The first CSC study was implemented in 2005; it applies to all public schools and measures the context of the schools based on different socioeconomic indicators. ANEP implements the survey within a representative sample of the children's families taken from each school. Particularly, the

[8]In the Uruguayan system, at the beginning of the year, teachers apply to the schools where they would prefer to go, and the more experienced ones have priority to choose first. Given this rule, the program incorporated a higher teacher pay for the participant schools, pretending to give a solid incentive for teachers with the highest levels of experience to choose these schools. This additional pay consisted of the salary for the hours devoted to the extra *Salas Docentes* meetings.

[9]The ECC program also intended to provide the selected schools with additional material resources, but as Cabrera and Webbink (2020) explain, this aspect was not too relevant in practice.

CSC study measures indicators referring to three defining aspects of the vulnerability of the students' context: household educational level, household socioeconomic level, and social integration level. Household educational level is defined by the educational attainment of the children's mothers. Household socioeconomic level is determined by variables such as the percentages of overcrowded households and households with difficulties accessing drinking water. Social integration level is defined by the fraction of households with at least one child between 4 and 15 years old that is not enrolled in the education system and by the number of families living in irregular settlements. These variables are self-reported. (ANEP, 2016)

The collection of these different indicators describes the socioeconomic context of families in each school, which is summarized in a single measure: the *Índice de Características Socioculturales* (ICSC). This score allows ANEP to sort schools from the poorest levels to the least critical ones. Ordered by the ICSC, the UC schools belonging to the two poorest quintiles are selected as eligible for the program. This reflects that APRENDER schools are a sub-group of UC. As expected, from one ICSC edition to the next one, most schools maintain the same treatment assignment condition. However, approximately a 17% of schools change from eligible for the program to non-eligible, or vice-versa, between the 2005 and 2010 editions, and between the 2010 and 2015 editions.

One last aspect of the APRENDER program is that there are jurisdictions at *Departamentos* level. *Departamentos* are the administrative regions in which the Uruguayan state is organized. In the case of APRENDER, these regional jurisdictions are in charge of evaluating the main difficulties that schools experiment within their corresponding area. Regional jurisdictions design common programs from such evaluations to face these primary tasks.

4 Data

Data used for this study mainly come from two different sources. First, a database from ANEP provides information referring to center identification, center characteristics, and student schooling trajectories. This database includes data for the whole universe of APRENDER and UC schools. Observations are available per year for the period 2007-2020. 738 is the number of schools for which information is available in the database.

In the ANEP database, schools have a unique identifier, the RUEE code, which allows following each school's evolution over the years. The ICSC index is available for each one of the three editions of the CSC study, together with the school categorization in quintiles according to its index (see Section 3 for details). The school category is also available for each school: if the school is UC or APRENDER (ECC for the period before 2011) each year. The number of students per school is available.

This database also contains data on a school-grade level for each of the six grades from primary school. The total number of observations is 50,220. The average number of students per group is provided by grade. Different outcomes on schooling trajectories are also available: grade retention, Insufficient attendance, and dropout. Grade retention is defined as the percentage of students that were grade-retained on each year-grade. Insufficient attendance refers to the percentage of students that attended classes more than 70 days a year but less than 140. This is considered a risk of grade retention due to absences. dropout is the percentage of students attending classes up to 70 days a year. It is regarded as an approximation of the risk of dropping out of school (ANEP, 2018). In addition, this dataset identifies which APRENDER schools had a PODES project approved for each year in the period 2017-2020.

Second, this paper obtains data from *Aristas*, which is a survey run by the *Instituto Nacional de Evaluación Educativa* (INEEd) that measures students cognitive level and socio-emotional skills in a sample of schools. This sample is designed to be representative at the national level. Outcomes come from standardized tests, which allows for comparing results across schools. Apart from that, these data provide a set of student and household characteristics, school features, and teachers' and principals' qualities. *Aristas* database contains information for both years when the *Aristas* study was conducted, 2017 and 2020, and for both school grades which were tested, third and sixth. The number of schools surveyed at least one of both years is 149. This dataset contains two different cognitive outcomes: Language and Math scores. These scores, as was mentioned above, come from

standardized tests and therefore are comparable across schools. Apart from that, based on standardized questions asked to students, we use socio-emotional indexes based on the Graded Response Model (INEEd (2018b), INEEd (2021), and Samejima (1997)). These main outcomes are available at the student level.

We also build different standardized Belief indexes from teachers, principals, and parents using *Aristas* database, as we show in Section 9. These indexes follow the same approach as non-cognitive main outcomes. In addition, we construct a set of variables capturing the level of supervision of parents, investments, and expectations they have of their kids. It also exploits data concerning teachers' pedagogy and school activities.

Additionally, this database contains the *Aristas* socioeconomic and cultural context index, which is a score measured by INEEd which pretends to quantify the vulnerability of the context of each student and school of the sample. This index is built following a similar methodology as the ICSC score constructed by ANEP (INEEd, 2018b; INEEd, 2021). Its purpose is only descriptive. It was measured in both editions of the *Aristas* survey, which ensures the possibility of comparing the level of critical context of schools between 2017 and 2020.

The total number of student-year combinations from *Aristas* database is 12,335. Some variables are available at the group-year level and others at the school-year level. While there are 615 group-year combinations, there are 163 school-year combinations.

5 Data description

5.1 Summary Statistics

We present summary statistics for the main variables of this paper in Table 1.

Table 1: **Descriptive Statistics**

	Mean	SD	Min	Max	N
Panel A: ANEP Database - grade level					
The school belongs to Montevideo region (dummy)	0.30	0.46	0.00	1.00	50220
Total number of students enrolled in school	283.58	154.64	3.00	1,138.00	50220
Number of students per group	21.89	5.56	1.00	58.83	50214
Treatment dummy (1 if APRENDER)	0.43	0.50	0.00	1.00	50220
Grade retention	5.75	4.36	0.00	30.56	50220
Dropout	5.22	18.21	0.00	100.00	50220
Insufficient attendance	10.13	10.73	0.00	100.00	50220
ICSC 2005 urban index	0.08	1.00	-2.18	3.37	49338
ICSC 2010 urban index	0.09	1.02	-2.19	4.64	50112
ICSC 2015 urban index	0.13	1.04	-2.08	3.57	49470
Panel B: *Aristas* Database - student level					
The student is a female (dummy)	0.50	0.50	0.00	1.00	12335
Aristas socioeconomic and cultural context index	-0.20	0.73	-1.89	2.23	9703
The student was grade-retained in the past at least once (dummy)	0.22	0.41	0.00	1.00	10991
Math test score for third and sixth grade	6.01	1.00	1.75	11.54	11178
Language test score for third and sixth grade	5.99	1.00	2.46	9.86	11191
Interpersonal skills score for sixth grade	4.77	1.00	0.78	7.12	5650
Intrapersonal skills score for sixth grade	4.78	1.00	1.58	7.20	5649
Motivation and learning self-regulation for sixth grade	4.81	1.00	1.24	7.02	5649
Belonging score for third and sixth grade	-0.12	1.00	-2.87	1.20	11055

Notes: The table reports summary statistics for the main variables of ANEP and *Aristas* databases. ANEP variables range from 2007 to 2020, and include from 1st to sixth grade. Each observation from ANEP corresponds to one grade of one school at one year. *Aristas* variables correspond to standardized tests conducted by INEEd in 2017 and 2020 to third and sixth graders. *Aristas* observations correspond to one student at one year. Test score variables were rescaled by their standard deviation. For both databases, only APRENDER and UC schools are included. Total number of ANEP schools of the database is 738, and total number of *Aristas* schools is 149.

Panel A contains the summary statistics for the variables obtained from ANEP. It can be seen that 30% of the database observations correspond to Montevideo, the Uruguayan capital. Thus, approximately 30% of the schools in the database belong to Montevideo and 70% to the rest of the regions. On average, a group from an APRENDER or UC school comprises 22 students. The treatment dummy average shows that 43% of the database observations are from APRENDER schools. The average level of insufficient attendance is 10%, which means that such a percentage of the students from a grade at one school-year attended classes more than 70 days but less than 140. In the case of dropout, the average level is 5%, and 6% for Grade-Retained.

Panel B, on its part, presents summary statistics for the variables that come from the

Aristas survey. Apart from the outcome variables, variables describing the characteristics of the students are summarized. Half of the students in the sample are females, while 22% were previously grade-retained at least once. We rescale the academic and socio-emotional outcomes by their standard deviation. Among the four socio-emotional variables shown, only the Belonging Score possesses a similar number of observations to the academic results. This is because the rest of the socio-emotional indexes were constructed using questions only answered by sixth-grade students.

Table 2 shows mean differences for the APRENDER and UC groups, both for ANEP and *Aristas* databases. In the case of ANEP, differences are divided by different periods according to the years when each edition of the ICSC index was active for school categorization. This is explained in Section 5.2. 2020 is analyzed separately for ANEP outcomes due to mismeasurement by authorities during the pandemic[10].

It can be observed that the vast majority of variables present a significant difference between APRENDER and UC schools, which outlines that, if compared with no additional identification strategy, both treated and control groups are enormously different. By comparing averages by group, differences in the context of where the students come from are not considered. Consequently, these differences include a selection bias, and a causal interpretation cannot be inferred. The percentage of schools that belong to Montevideo and the total number of students enrolled in the school differ significantly between both categories and across periods. An APRENDER school is more probably from Montevideo than a UC school and presents, on average, a higher number of enrolled kids. The number of students per group also shows significant differences in the first two periods, but that significance disappears in the last period. Also, even when differences are statistically significant in the first two periods, the size of these differences seems to be of little relevance. Thus, both groups seem to have no big differences in this variable.

In terms of the schooling trajectories, students from APRENDER schools, as expected, have a worse performance than the rest of the students for the three periods analyzed. For all three of insufficient attendance, dropout, and grade retention, the differences are high and persistent through periods. The ICSC index is the variable that defines the quintiles that

[10]Table 11 in the Appendix A presents the mean differences for the ANEP database in 2020. The pandemic effect makes 2020 an atypical year for ANEP outcomes, as for an important part of the year, attendance was not compulsory, and thus it was not controlled. Dropout and insufficient attendance definitions depend on two raw thresholds for the number of days the students attend classes. As they were not adapted, their levels increased sensitively. This can be seen in the Table. Thus, we understand that ANEP outcomes for 2020 are not directly comparable with those of previous years. This issue only arises for ANEP variables and is not a problem for *Aristas* outcomes.

determine the treatment category of each school. As can be expected, it presents high and significant differences. The higher the ICSC index, the higher the sociocultural vulnerability surrounding the school.

Table 2: **Mean Difference**

	APRENDER		UC		Difference	
	Mean	N	Mean	N	Mean Diff.	SE
Panel A: ANEP Database - 2007-2010						
The school belongs to Montevideo region (dummy)	0.32	6426	0.28	9984	0.04***	(0.01)
Total number of students enrolled in school	310.58	6426	289.44	9984	21.13***	(2.63)
Number of students per group	23.39	6426	23.74	9984	-0.34***	(0.09)
Grade retention	8.80	6426	5.60	9984	3.20***	(0.07)
Dropout	2.01	6426	0.97	9984	1.03***	(0.05)
Insufficient attendance	10.67	6426	6.60	9984	4.07***	(0.09)
ICSC 2005 urban index	1.06	6426	-0.56	9792	1.62***	(0.01)
Panel B: ANEP Database - 2011-2016						
The school belongs to Montevideo region (dummy)	0.33	9372	0.28	11922	0.05***	(0.01)
Total number of students enrolled in school	289.25	9372	269.90	11922	19.34***	(2.07)
Number of students per group	21.12	9366	21.51	11922	-0.39***	(0.07)
Grade retention	7.38	9372	4.39	11922	3.00***	(0.05)
Dropout	1.07	9372	0.61	11922	0.46***	(0.02)
Insufficient attendance	10.98	9372	5.82	11922	5.16***	(0.09)
ICSC 2010 urban index	1.00	9372	-0.62	11862	1.62***	(0.01)
Panel C: ANEP Database - 2017-2019						
The school belongs to Montevideo region (dummy)	0.37	4404	0.25	5106	0.12***	(0.01)
Total number of students enrolled in school	292.64	4404	254.24	5106	38.40***	(2.98)
Number of students per group	20.44	4404	20.45	5106	-0.01	(0.10)
Grade retention	5.35	4404	3.09	5106	2.26***	(0.07)
Dropout	0.80	4404	0.48	5106	0.32***	(0.02)
Insufficient attendance	17.24	4404	8.26	5106	8.98***	(0.16)
ICSC 2015 urban index	1.10	4404	-0.64	5106	1.74***	(0.01)
Panel D: *Aristas* Database - 2017 and 2020						
The student is a female (dummy)	0.50	6093	0.50	6242	-0.00	(0.01)
Aristas socioeconomic and cultural context index	-0.50	4675	0.09	5028	-0.58***	(0.01)
The student was grade-retained in the past at least once (dummy)	0.27	5336	0.17	5655	0.10***	(0.01)
Math test score for third and sixth grade	5.75	5453	6.25	5725	-0.51***	(0.02)
Language test score for third and sixth grade	5.77	5449	6.20	5742	-0.44***	(0.02)
Interpersonal skills score for sixth grade	4.67	2761	4.87	2889	-0.20***	(0.03)
Intrapersonal skills score for sixth grade	4.72	2758	4.83	2891	-0.11***	(0.03)
Motivation and learning self-regulation for sixth grade	4.78	2759	4.83	2890	-0.05*	(0.03)
Belonging score for third and sixth grade	-0.14	5376	-0.10	5679	-0.04*	(0.02)

Notes: The Table reports mean differences between treated (APRENDER) and control (UC) groups for the main variables of ANEP and *Aristas* databases. For ANEP variables, the differences are reported for the three periods used by this study: 2007-2010, 2011-2016 and 2017-2019. Grades are included from 1st to sixth, and each observation corresponds to one grade of one school at one year. *Aristas* variables correspond to standardized tests conducted by INEEd in 2017 and 2020 to third and sixth graders. *Aristas* observations correspond to one student at one year. Test score variables were rescaled by their standard deviation. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Panel D shows differences for the *Aristas* variables. The only variable that does not present a significant difference is the gender dummy, as both APRENDER and UC schools have, on average, exactly one-half of students being males. As expected, the difference is also significant in the case of the *Aristas* socioeconomic and cultural index. The definition

of this index is inverse to the ICSC index: the higher it is, the lower the sociocultural vulnerability surrounding the school. The table shows a positive difference for the *Aristas* index in favor of UC schools, demonstrating that it successfully correlates with the ICSC index from ANEP. APRENDER schools also show a positive difference in the percentage of students previously grade-retained at least once. This is the expected relation, as grade retention tends to correlate positively with the kid's vulnerability, and the APRENDER schools are the most vulnerable. The same can be said about the results of the different cognitive and non-cognitive tests, where APRENDER schools present inferior outcomes. The differences appear to be higher for the academic outcomes, both Math and Language, than for the socio-emotional outcomes. Moreover, in the case of Motivation & Learning Self-regulation and Belonging scores, differences are less significant, and their magnitudes appear to be not much relevant.

Table 12 in Appendix A shows summary statistics for the additional variables that the *Aristas* database provides. These intermediate outcomes will be analyzed in Section 9.

5.2 Graphical Analysis

There are three editions of the ICSC index. As mentioned in Section 3, the CSC surveys were conducted at the end of 2005, 2010, and 2015. Each survey created a different corresponding ICSC index. However, there is no clear evidence about when each ICSC index started being applied for categorizing the schools. We apply a data-driven approach to determine which ICSC edition was used each year. An APRENDER complier is an APRENDER school in one of the first two quintiles of an ICSC index, while a UC complier is a UC school in one of the last three quintiles of the same index. This study obtains the proportion of compliers in both groups for each year and each ICSC index edition. We assume that the ICSC index edition applied for a year is the one that maximizes the proportion of APRENDER and UC compliers.

Figure 4 in the Appendix B shows the evolution of the proportion of APRENDER compliers and UC compliers for each ICSC edition. Following the mentioned criteria, we apply the ICSC-2005 from 2007 to 2010, the ICSC-2010 from 2011 to 2016, and the ICSC-2015 from 2017 to 2020. The compliance by year is almost perfect after 2008.

Figure 5 in the Appendix B and Figure 1 show the first-stage graphs for the three periods analyzed: the effect of eligibility for the program on being effectively treated. At the cutoff, there is an abrupt change in the probability of being treated for the three periods exposed.

This jump in probability is one of the critical features of a Regression Discontinuity Design (Cattaneo, Idrobo, and Titiunik, 2020), which is the technique we use, as detailed in Section 6. Particularly, as Figure 1 shows, there is perfect compliance for the second APRENDER period (2017-2020). Every eligible school for the program is treated, and no treated school is non-eligible. This aspect will be relevant for Section 7, where a sharp RD design will be implemented for this period.

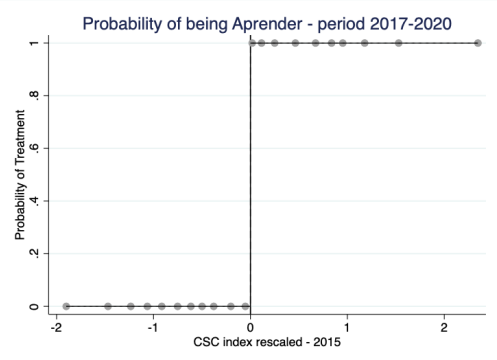

Figure 1: First stage graphs

6 Identification Strategy

As mentioned in Section 3, the ICSC index determines whether a school is eligible to be APRENDER or UC. According to the ANEP rule, UC schools should be in the third quintile or higher, whereas APRENDER schools should be in the first two quintiles. This assignment rule was also applied for the ECC program after the first ICSC index was created in 2005. Therefore, to correct for selection bias, this paper exploits the abrupt change in the probability of being an APRENDER school (and ECC before the program redefinition in 2011) between the second and third quintile, applying a Regression Discontinuity model. Being an APRENDER school is the treatment, and the continuous running variable is the ICSC index. The estimated equation is the following for general models for each period:

$$Y_{r,t,i,g} = \alpha_0 + \alpha_1 E_{r,t,i} + f(s_i) + \alpha_t \mu_t + \alpha_g \mu_g + \alpha_r \mu_r + \epsilon_{r,t,i,g} \tag{1}$$

where $Y_{r,t,i,g}$ is the outcome variable at the r,t,i,g level (region-year-school-grade level). The $E_{r,t,i}$ is a dummy variable for eligibility for the APRENDER program that takes 1 if the school ICSC rescaled score is higher than zero. s_i is the ICSC school score for the period. $f(.)$ is a smooth function of the forcing variable, which is allowed to be different at either side of the cutoff. μ_t are the year fixed effects and μ_g the grade fixed effects. μ_r are the region fixed effects. This fixed effect is a dummy that takes 1 if the school belongs to Montevideo. As explained in Section 3, there are background differences between schools located in the capital and the rest of the regions within Uruguay. Cluster is set at the level of treatment: schools.

The α_1 coefficient will yield the causal effect of being eligible for APRENDER on the outcome. This is the coefficient that this paper estimates for the last period (2017-2020), given that the compliance is perfect, as Subsection 5.2 outlines. On its part, since the treatment assignment does not have perfect compliance for the first two periods analyzed (2007-2010 & 2011-2016), we estimate the treatment effect using a Fuzzy Regression Discontinuity Design. This paper obtains a local average treatment effect using an IV approach in which participation $P_{r,t,i}$ is instrumented with program eligibility $E_{r,t,i}$.

$$P_{r,t,i,g} = \delta_0 + \delta_1 E_{r,t,i} + f(s_i) + \delta_t \mu_t + \delta_g \mu_g + \delta_r \mu_r + \upsilon_{r,t,i,g} \tag{2}$$

$$Y_{r,t,i,g} = \beta_0 + \beta_1 P_{r,t,i,g} + f(s_i) + \beta_t \mu_t + \beta_g \mu_g + \beta_r \mu_r + \eta_{r,t,i,g} \tag{3}$$

Providing that the first stage is relevant, the independence assumption is credible, and the exclusion restriction holds, the estimate of β_1 can be interpreted as the causal effect of treatment for compliers on the $Y_{r,t,i,g}$ outcomes (Angrist & Pischke, 2009). Compliers are those schools eligible for the treatment that are effectively treated.

The Regression Discontinuity Design we implement in this study, and particularly the bandwidth selection criteria and inference strategies, are based on Cattaneo, Idrobo, and Titiunik (2020). We use an optimality criteria according to the minimization of the Mean Squared Error (MSE) for the bandwidth selection. The bandwidth selected is the one that minimizes the sum of the bias and the variance of the treatment effect estimate. This method is an alternative that ensures attaining the optimal properties of the local estimator. The estimate considered is the conventional. However, we consider the Robust-Bias Correction Method to make valid inferences. Thus, the confidence interval and p-values are obtained from the robust bias-corrected estimate and variance. The chosen kernel function to weigh the observations near the cutoff is triangular, and the order of the local polynomial is linear. These options allow us to obtain the optimal properties of the estimator.

In Subsection 7.1, we estimate the local effect of the APRENDER program on grade retention, dropout, and insufficient attendance for all grades. The results are estimated for three periods at grade level: the ECC program before the APRENDER reform (2007-2010), a first APRENDER period (2011-2016), and a second APRENDER period (2017-2020). Each period corresponds to the time when each of the three ICSC index editions was active. For this last period, the 2020 year is estimated separately due to misreporting explained by the pandemic situation, as we show in Subsection 5.1. Thus, the periods for the estimation of ANEP outcomes are (1) 2007-2010, (2) 2011-2016, (3) 2017-2019, (4) 2020 [11]. As we reflect in Section 3, primary schooling cycles have clear differences. Therefore, this paper also runs specifications for ANEP outcomes splitting grades by first and second cycles.

In Subsection 7.2, this paper estimates the local effect of APRENDER on standardized cognitive and non-cognitive outcomes. As *Aristas* data are at the student level, we run *Aristas* specifications at the region-year-school-grade-student level. When available, both grades surveyed in *Aristas* (third and sixth) are included. Available cognitive outcomes are Math and Language Test Scores. On its part, non-cognitive or socio-emotional outcomes are

[11] The results for 2020 are shown in Appendix K

(1) an Interpersonal Abilities index, (2) an Intrapersonal Abilities index, (3) a Motivation & Learning Self-regulation index, and (4) a Belonging Score. These socio-emotional outcomes are only available for sixth graders, except for the Belonging Score, which is available for both grades. As with ANEP outcomes, this study also runs separate regressions for *Aristas*, splitting third and sixth grades when both are available.

To add confidence to the results obtained, we conducted a pre-treatment analysis. This test allows us to check if the effects found are not a consequence of a difference between treated and control groups before applying the treatment. Specifically, it is interesting to check if the result estimated for a period is not affected by treatment from the previous period. To do this, this paper conducts two tests. First, we run the first stage -the effect of treatment assignment on treatment condition- using the treatment condition from the previous period. If no significance rises, it would mean that kind of a re-shuffling is done close to the cutoff, where some previously treated schools are now assigned to control, and vice versa. This would reinforce the idea that the found effect responds to the treatment applied in the corresponding period. Second, this paper applies the same RD specification for ANEP schooling trajectories described in the previous lines, using the outcome variables corresponding to the previous period. Finding no significance in this test would support the belief that the results found are not a consequence of differences already present before the corresponding period.

We also conduct several robustness analyses and falsification tests to measure how robust the obtained results are. These analyses are based on the propositions of Cattaneo, Idrobo, and Titiunik (2020). Precisely, the tests conducted are the following: (1) Density Test for the Running Variable; (2) Placebo Outcomes; (3) Placebo Cutoffs; (4) Sensitivity to Observations near the Cutoff; and (5) Sensitivity to Different Specifications. The Density Test for the running variable determines if the score used for the RD Design shows no evidence of manipulation near the cutoff. For this study, this test is implemented to ensure that the schools did not manipulate their ICSC score in some way to change their treatment status. In the first place, it is important to mention that this possibility seems difficult because of the design of the index: it is a continuous score that results from the combination of a diversity of other indicators measured by a central authority every five years. Nevertheless, we conduct a graphical and statistical analysis to test this possibility. The statistical test used is the one proposed by Cattaneo, Jansson, and Ma (2020b).

The Placebo Outcomes and Placebo Cutoffs analyses modify the implemented specification by selecting fake outcomes and fake cutoffs, respectively, and check if the results obtained

are significant and similar to the ones obtained in the original specifications. The placebo outcomes should be unaffected by the treatment, and there should not be a significant treatment effect at fake cutoffs. We also use Placebo cutoffs to check whether the effects that arise for the actual cutoff are random shocks or genuine effects. The regression is run for artificial cutoffs above and below the actual one. The sample is restricted to only UC observations for those cutoffs below 0 and only APRENDER schools for cutoffs above 0. No effects are expected to be seen, as there should be no discontinuities apart from the actual cutoff. We only conduct an analysis of this kind for the ANEP specifications, where the amount of observations is sufficiently high.

The Sensitivity to Observations near the Cutoff analysis pretends to measure if the results obtained are driven mainly by the observations closest to the cutoff. It consists of running the paper specifications excluding the observations in the most local neighborhood around the cutoff. Finding similar effects despite these exclusions increases the lack of evidence of an artificial result obtained in the study.

The Sensitivity to Different Specifications test checks if the estimated results persist when different RDD specifications are chosen for the model. For this test, this study replaces the bandwidth selection method, the kernel function, and the order of the local polynomial used for the main estimations with some alternatives.

Together, this group of analyses pretends to add evidence that the results obtained in the study are not driven by some particular characteristic of the data, the treatment design, or the model specified. That is, they pretend to incorporate more evidence for the plausibility of the implemented specification.

In Section 8, we run the same RD specifications as in Subsection 7.2, but for sub-groups of students. This is possible given that the *Aristas* database allows splitting students according to variables such as gender and their level of *Aristas* sociocultural index. This analysis enables adding information to the question if the APRENDER program is impacting specific groups of students in a higher or lower way than others.

Furthermore, in Section 9 -using the same strategies as in Section 7- we present an analysis of mechanisms to evaluate which intermediate channels are affected by the program's implementation. We analyze mechanisms at the school, teacher, and student-family levels. We frame these estimations under the theoretical model from Appendix H.

7 Main results

7.1 The effect of APRENDER program on schooling trajectories

As indicated in Section 6, this paper exploits a Regression Discontinuity strategy to estimate the local difference between APRENDER and UC schools in schooling trajectories outcomes that are relevant to the objectives of the intervention: grade retention, dropout, and insufficient attendance.

As Table 3 shows, we find a significant reduction in grade retention for the second period of the program. The schools that belong to the APRENDER program experience a decrease of 2.3 percentage points in the grade retention level of the students. Given that the average level for the schools inside the bandwidth is 4.0%, the magnitude of this effect seems relevant. As well, the mean differences shown in Table 2 from Subsection 5.1 expose that the magnitude of the estimated effect is nearly the same as the raw difference between APRENDER and UC schools, which reinforces the idea of the relevance of the result. As we show in Tables 13 & 14 in the Appendix C, no significant effects arise for the previous periods analyzed. Figure 6 in the Appendix C and Figure 2 illustrate these results graphically. As can be seen, the period previous to APRENDER and the first period of the program show continuity in the grade retention levels. In contrast, Figure 2 shows a negative jump for the second period of the program.

On its part, when results are analyzed by schooling cycle, there is a contrast between both of them. There is a significant reduction for the first cycle: the impact is 4.6 percentage points. This again appears to be important, as the mean for the schools included in the bandwidth is 6.3. On the contrary, there are no significant effects for the second cycle. Therefore, it can be concluded that the effect found for all grades is driven mainly by the first three grades of the primary cycle.

There are no significant effects of APRENDER on dropout for all grades for every period and specification, as Table 3 illustrates. Similarly, there are no significant effects when schooling cycles are separated.

For insufficient attendance, the specification for all grades neither presents significant effects in any period nor specification as Table 3 shows. Nevertheless, when analyzing the results separately by schooling cycle, significant effects arise for the first cycle in the second APRENDER period. Treated schools show a reduction of 3.7 percentage points, significant at 10% level. As the mean inside the bandwidth is 14.7%, the drop represents 25.3% of the

Table 3: **Effect of APRENDER on schooling trajectories for 2017-2019**

	Grade Retention			Insufficient Attendance			Dropout		
	(1) all grades	(2) first cycle	(3) second cycle	(4) all grades	(5) first cycle	(6) second cycle	(7) all grades	(8) first cycle	(9) second cycle
Conventional	-2.306***	-4.621***	-0.190	-2.261	-3.708*	-1.273	-0.072	-0.188	0.010
	(0.773)	(1.341)	(0.302)	(1.695)	(2.195)	(1.533)	(0.150)	(0.198)	(0.220)
	[-3.820,-0.791]	[-7.250,-1.991]	[-0.781,0.401]	[-5.584,1.062]	[-8.009,0.594]	[-4.277,1.731]	[-0.366,0.223]	[-0.575,0.200]	[-0.421,0.442]
Bias-corrected	-2.619***	-5.173***	-0.232	-2.715	-4.317**	-1.592	-0.093	-0.234	-0.009
	(0.773)	(1.341)	(0.302)	(1.695)	(2.195)	(1.533)	(0.150)	(0.198)	(0.220)
	[-4.134,-1.105]	[-7.802,-2.544]	[-0.823,0.359]	[-6.038,0.607]	[-8.619,-0.016]	[-4.597,1.412]	[-0.388,0.201]	[-0.622,0.153]	[-0.441,0.422]
Robust	-2.619***	-5.173***	-0.232	-2.715	-4.317*	-1.592	-0.093	-0.234	-0.009
	(0.875)	(1.490)	(0.361)	(1.999)	(2.573)	(1.820)	(0.179)	(0.238)	(0.265)
	[-4.334,-0.905]	[-8.094,-2.252]	[-0.939,0.475]	[-6.633,1.203]	[-9.360,0.725]	[-5.159,1.974]	[-0.445,0.258]	[-0.700,0.232]	[-0.528,0.510]
Controls:									
Grade FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Kernel	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular
Bandwidth Selection	MSE-optimal	MSE-optimal	MSE-optimal	MSE-optimal	MSE-optimal	MSE-optimal	MSE-optimal	MSE-optimal	MSE-optimal
Order Loc. Poly. (p)	1	1	1	1	1	1	1	1	1
Mean Dep. Var.	3.988	6.339	1.441	12.386	14.679	10.479	0.582	0.561	0.604
SD Dep. Var.	6.079	7.066	2.950	10.471	11.484	9.044	1.603	1.434	1.763
Observations	9,491	4,745	4,746	9,491	4,745	4,746	9,491	4,745	4,746
Eff. Obs. at the Left ; Right	1614 ; 1494	662 ; 657	1267 ; 1044	2292 ; 1800	989 ; 819	1120 ; 864	2328 ; 1872	893 ; 783	1234 ; 990
Eff. Schools at the Left ; Right	98 ; 85	80 ; 75	153 ; 118	138 ; 102	119 ; 93	135 ; 98	140 ; 106	108 ; 89	148 ; 112

Notes: The Table reports the RD specification estimates associating Grade Retention, Insufficient Attendance, and Dropout with the ICSC index for 2017-2019. Grade Retention is defined as the percentage of students that were grade-retained. Insufficient Attendance is the percentage of students who attended more than 70 days but less than 140 days in the academic year. Dropout is the percentage of students who attended more than 70 days but less than 140 days in the academic year. Columns (1), (4), and (7) include all primary grades. (2), (5), and (8) only include first to third grade. (3), (6), and (9) only include fourth to sixth grade. The table reports three different estimates for each estimation: Conventional, Bias-Corrected, and Robust-Bias-Corrected. According to Cattaneo et al. (2020), the estimate considered is the Conventional, while the Confidence Interval and p-value of the Robust-Bias-Corrected estimate are taken into account for inference; see text for details. The ICSC index measures the vulnerability of the area where the school is located according to socio-economic indicators; see text for details. It is rescaled in such a way that a school is eligible to be APRENDER if its index is higher than zero; otherwise, it should be UC. All specifications implement a sharp RD design due to perfect compliance. Grade, year, and region fixed effects are implemented in every specification. Clusters at the school level are taken in every specification. Kernel indicates how the observations are weighted. Bandwidth Selection indicates the criteria used to choose bandwidth. Order Loc. Poly. (p) indicates the order of the local polynomial used for the estimation. The mean and standard deviation of the dependent variable are measured inside the bandwidth used for the estimation. Effective observations are those that are taken into account in local estimations. Standard errors in parenthesis. Confidence Intervals in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

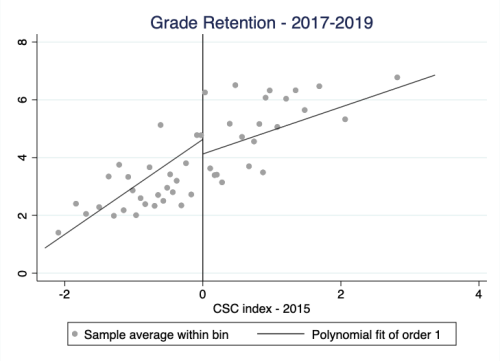

Figure 2: Effect of APRENDER on Grade Retention

average for the individuals in question. On the other hand, the estimation for the second schooling cycle shows no significant effect in any specification for any period.

To summarize, when results are analyzed for all grades, grade retention is the only outcome significantly affected by the program. This effect only arises for the last period of APRENDER. As mentioned, the magnitude is relevant. Additionally, when the analysis is separated by schooling cycles, a significant and relevant effect for grade retention arises for the first cycle. Although we find no effect for insufficient attendance when all grades are analyzed together, the first cycle shows a significant reduction in its level due to treatment.

The ECC period does not show significant effects for schooling trajectories. This goes in line with the results from Cabrera & Webbink (2020). Similarly, the first period of APRENDER (2011-2016) does not experience significant impacts. This finding contrasts with the significant effects on grade retention and insufficient attendance found for the second period of APRENDER, which may seem striking at first. A possible explanation for this may be in the time that a new program of this type needs to be fully implemented.

7.2 The effect of APRENDER program on academic achievement and non-cognitive skills

This study also exploits a Regression Discontinuity Design to estimate the local difference between APRENDER and UC schools in the standardized Language, Math, and socio-emotional tests conducted for the *Aristas* study, as we explain in Section 4. As mentioned in Section 6, this paper runs these estimations at the student level since data are available at that unit.

As Table 4 shows, this study finds a significant positive effect on Math and Language

scores. The Math test results show a significant positive impact at the 10% level. Given these results, it can be said that a student from an APRENDER school scores 0.27 standard deviations higher than a student from a UC school. In the case of the Language test, results are slightly higher in magnitude than for Math tests, and the significance is at the 1% level in both cases. A student from a treated school scores 0.31 standard deviations higher than a student from a control institution. These magnitudes of the estimated effects on students' academic performance are substantially high, mainly for Language scores. Figure 7 in the Appendix D shows there are jumps at the cutoff for both variables.

We also take into consideration effects split by grade. For third graders, there is no significant effect on Math scores for any specification, but there is a significant increase of 0.22 standard deviations in Language scores. On its part, sixth graders expose significant increases in both outcomes. While Math scores show an increase of 0.38 standard deviations, Language scores rise by 0.48 standard deviations.

Table 4: **Effect of APRENDER on Academic Outcomes**

	Math Score			Language Score		
	(1) third & sixth	(2) third	(3) sixth	(4) third & sixth	(5) third	(6) sixth
Conventional	0.272*	0.139	0.383***	0.307***	0.219**	0.481***
	(0.143)	(0.168)	(0.137)	(0.096)	(0.100)	(0.127)
	[-0.009,0.552]	[-0.191,0.469]	[0.115,0.651]	[0.119,0.495]	[0.022,0.416]	[0.233,0.729]
Bias-corrected	0.315**	0.184	0.412***	0.352***	0.248**	0.547***
	(0.143)	(0.168)	(0.137)	(0.096)	(0.100)	(0.127)
	[0.035,0.596]	[-0.146,0.514]	[0.144,0.680]	[0.164,0.540]	[0.051,0.445]	[0.298,0.795]
Robust	0.315*	0.184	0.412***	0.352***	0.248**	0.547***
	(0.170)	(0.204)	(0.159)	(0.110)	(0.119)	(0.146)
	[-0.017,0.648]	[-0.216,0.584]	[0.100,0.724]	[0.136,0.568]	[0.015,0.482]	[0.261,0.832]
Controls:						
Grade FE	Yes	No	No	Yes	No	No
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes	Yes	Yes
Kernel	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular
Bandwidth Selection	MSE-optimal	MSE-optimal	MSE-optimal	MSE-optimal	MSE-optimal	MSE-optimal
Order Loc. Poly. (p)	1	1	1	1	1	1
Mean Dep. Var.	5.895	5.942	5.849	5.889	5.899	5.847
SD Dep. Var.	0.922	0.928	0.924	0.964	0.939	0.993
Observations	11,178	5,496	5,682	11,191	5,452	5,739
Eff. Obs. at the Left ; Right	1433 ; 2031	1205 ; 1250	655 ; 985	1063 ; 1812	690 ; 1000	356 ; 839
Eff. Schools at the Left ; Right	20 ; 27	32 ; 32	17 ; 25	13 ; 24	20 ; 27	9 ; 21

Notes: The Table reports the RD specification estimates associating Math and Language tests results with the ICSC index. Dependent variables are the results from *Aristas* Math and Language standardized tests conducted by INEEd in 2017 and 2020 to third and sixth graders. Columns (1) and (4) include both third and sixth grades. (2) and (5) only include third grade. (3) and (6) only include sixth grade. The table reports three different estimates for each estimation: Conventional, Bias-Corrected, and Robust-Bias-Corrected. According to Cattaneo et al. (2020), the estimate considered is the Conventional, while the Confidence Interval and p-value of the Robust-Bias-Corrected estimate are taken into account for inference; see text for details. The ICSC index measures the vulnerability of the area where the school is located according to socio-economic indicators; see text for details. It is rescaled in such a way that a school is eligible to be APRENDER if its index is higher than zero; otherwise, it should be UC. All specifications implement a sharp RD design due to perfect compliance. Grade, year, and region fixed effects are implemented in every specification. Clusters at the school level are taken in every specification. Kernel indicates how the observations are weighted. Bandwidth Selection indicates the criteria used to choose bandwidth. Order Loc. Poly. (p) indicates the order of the local polynomial used for the estimation. The mean and standard deviation of the dependent variable are measured inside the bandwidth used for the estimation. Effective observations are those that are taken into account in local estimations. Standard errors in parenthesis. Confidence Intervals in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Apart from cognitive performance in Math and Language, *Aristas* conducts a series of tests that allow to create socio-emotional indexes measuring students' strength in such aspects. First of all, as detailed in Section 4, we construct a Belonging Score for both third and sixth graders. Columns (1)-(2) in Table 5 outline that there are no significant effects of APRENDER on this outcome for any specification when both grades are included. Nevertheless, a surprising result arises for sixth graders when the regression is run separately for third and sixth grades. This paper finds a significant reduction at the 5% level, when, in fact, a positive result was expected. As we show later in Subsection 7.4, this effect indicates not much robustness. On its part, third graders show no significant impact.

Table 5: **Effect of APRENDER on Socio-emotional Outcomes**

	Belonging Score			Interpersonal	Intrapersonal	Motivation
	(1) third & sixth	(2) third	(3) sixth	(4) sixth	(5) sixth	(6) sixth
Conventional	-0.093	0.109	-0.310**	-0.206*	0.062	-0.023
	(0.085)	(0.139)	(0.145)	(0.124)	(0.133)	(0.097)
	[-0.259,0.073]	[-0.164,0.381]	[-0.595,-0.025]	[-0.450,0.038]	[-0.200,0.324]	[-0.213,0.167]
Bias-corrected	-0.128	0.099	-0.378***	-0.247**	0.061	-0.049
	(0.085)	(0.139)	(0.145)	(0.124)	(0.133)	(0.097)
	[-0.294,0.038]	[-0.174,0.372]	[-0.662,-0.093]	[-0.490,-0.003]	[-0.201,0.322]	[-0.239,0.141]
Robust	-0.128	0.099	-0.378**	-0.247*	0.061	-0.049
	(0.100)	(0.169)	(0.170)	(0.144)	(0.155)	(0.114)
	[-0.323,0.067]	[-0.232,0.430]	[-0.712,-0.043]	[-0.528,0.035]	[-0.244,0.365]	[-0.272,0.174]
Controls:						
Grade FE	Yes	No	No	No	No	No
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes	Yes	Yes
Kernel	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular
Bandwidth Selection	MSE-optimal	MSE-optimal	MSE-optimal	MSE-optimal	MSE-optimal	MSE-optimal
Order Loc. Poly. (p)	1	1	1	1	1	1
Mean Dep. Var.	-0.132	-0.133	-0.157	4.727	4.729	4.785
SD Dep. Var.	1.017	0.957	1.079	1.010	1.028	1.011
Observations	11,055	5,332	5,723	5,650	5,649	5,649
Eff. Obs. at the Left ; Right	1419 ; 1999	1482 ; 1548	750 ; 1014	1368 ; 1499	712 ; 1016	868 ; 1081
Eff. Schools at the Left ; Right	20 ; 27	43 ; 39	20 ; 26	37 ; 36	19 ; 26	24 ; 27

Notes: The Table reports the RD specification estimates associating belonging tests results with the ICSC index. The table reports three different estimates for each estimation: Conventional, Bias-Corrected, and Robust-Bias-Corrected. According to Cattaneo et al. (2020), the estimate considered is the Conventional, while the Confidence Interval and p-value of the Robust-Bias-Corrected estimate are taken into account for inference; see text for details. Dependent variables are the results from *Aristas* socio-emotional standardized tests conducted by INEEd in 2017 and 2020: (Belonging Score), (Interpersonal Abilities), (Intrapersonal Abilities), and (Motivation and Learning Self-regulation). The Belonging Score is available for third and sixth graders, while the rest of indexes were only performed by sixth graders. Column (1) includes both third and sixth grades. (2) only includes third grade. (3)-(6) only include sixth grade. The ICSC index measures the vulnerability of the area where the school is located according to socio-economic indicators; see text for details. It is rescaled in such a way that a school is eligible to be APRENDER if its index is higher than zero; otherwise, it should be UC. All specifications implement a sharp RD design due to perfect compliance. Year and region fixed effects are implemented in every specification. (1) implements grade fixed effects. Clusters at the school level are taken in every specification. Kernel indicates how the observations are weighted. Bandwidth Selection indicates the criteria used to choose bandwidth. Order Loc. Poly. (p) indicates the order of the local polynomial used for the estimation. The mean and standard deviation of the dependent variable are measured inside the bandwidth used for the estimation. Effective observations are those that are taken into account in local estimations. Standard errors in parenthesis. Confidence Intervals in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Besides the Belonging Score measured, sixth graders also perform other socio-emotional tests: (1) Interpersonal Abilities, (2) Intrapersonal Abilities, and (3) Motivation & Learning Self-regulation. As Columns (3)-(4) from Table 5 outline, there is a significant reduction in the Interpersonal abilities index of 0.21 standard deviations at the 10% significance level. This is also a striking result, as the opposite impact would be expected. However, this effect does not thoroughly resist robustness tests conducted in Subsection 7.4. No significant results are found in any specification for the remaining two indexes of socio-emotional outcomes, as Columns (5) to (8) reflect. Therefore, it is possible to say that no apparent effects of the APRENDER program arise on socio-emotional measures.

7.3 Pre-treatment Analysis

This paper raises two questions to further support the interpretation of the estimated effects as causal. First, as this study finds effects for the second period of the APRENDER program, the question remains if the treated schools are not accumulating a lagged effect from the previous period. To answer this question, we run the first stage using the treatment condition from the first period of APRENDER: the effect of being eligible for the treatment according to the 2015 ICSC index on being effectively treated in 2011-2016. Appendix E shows the estimations. There are no significant effects, meaning there is a kind of reshuffling for the second period of the program near the cutoff. This implies that the previous treatment condition is not determining the treatment condition in the second period. We find no effects when the same test is run using only the *Aristas* sample. This supports the idea that a lagged treatment effect from the previous period does not drive the treatment's estimated effect.

The second question is if the treated schools from the second APRENDER period were already different in the outcomes relative to controls before the contemporary treatment. We run the effect of the treatment in the second period on the ANEP outcomes for 2011-2016. As we show in Appendix E, there is no significant effect on ANEP outcomes. This supports the idea that the schools treated in the second period of the program were not different before the treatment and that the program drives the effect. Again, we conducted the same analysis for the *Aristas* sample, and we found no results either.

Both of these analyses add confidence to the assumption that the sample is balanced for the previous years to the second APRENDER period. Thus, the estimated effects for this period appear to be driven only by contemporary treatment.

7.4 Robustness Analysis

As mentioned in Section 6, we conduct robustness tests to check the validity of the model and the results obtained in Subsections 7.1 & 7.2. Such tests are performed for the identifying designs, emphasizing the specifications that provide significant results.

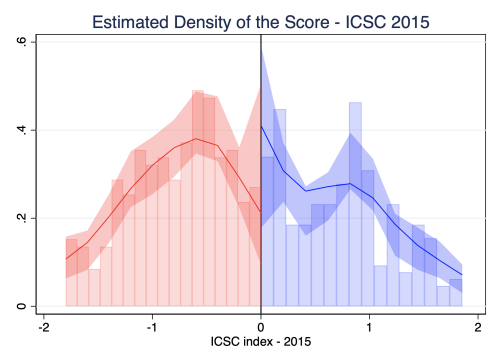

Figure 3: Density estimation for the running variable

As Table 17 in the Appendix F shows, we do not reject the null hypothesis for all three ICSC index editions when performing the density test of the running variable: continuity along the cutoff is not rejected. This adds confidence to the plausibility of the main assumption: schools' lack of manipulation of the score to change the treatment status. Figure 3 illustrates this result graphically for the last period analyzed (2017-2019)[12].

Besides the Density Test for the running variable, as specified in Section 6, we conduct a Placebo Outcome analysis to add confidence to the similarity of the schools along the cutoff and the lack of self-selection into one or the other treatment status. For this test, we use the *Aristas* index, which describes the students' background. As described in Section 4, this index is composed of variables that accomplish the condition of being determinants of the student's outcomes without being affected by the treatment status. Table 18 in Appendix F shows no significant effect of APRENDER on the *Aristas* socioeconomic and cultural index. This result adds confidence to the main assumption that the families from one and the other side of the cutoff are no dissimilar.

In Appendix F, we apply further robustness tests to the estimated effects shown in Subsections 7.1 & 7.2: Placebo Cutoffs, Donut Hole, & Sensitivity to Different Specification. The effect of APRENDER on grade retention is robust to every test specified, both when including all grades and when including just the first schooling cycle. The same cannot be said about the effect on insufficient attendance in the first cycle, which fails to resist the different tests conducted in this subsection.

In the case of *Aristas* outcomes, the treatment effect on Language scores shows robustness. A similar conclusion can be said about the impact for only sixth grade, although some sensitivity is shown in the Donut Hole analysis. The effect estimated for only third grade

[12]The analogous graphs for the two previous periods analyzed are in Figure 3 in the Appendix F

did not perform well in robustness tests. The significance of the impact on Math scores does not either resist the different robustness tests consistently when both third and sixth grades are included. On the contrary, the estimated effect presents more robustness when only sixth grade is included. On its part, the adverse effects estimated for the Belonging Score and Interpersonal Abilities in sixth grade do not show robustness. This confirms that both results on socio-emotional variables that were found to be significant and opposite to the expected sign should not be considered.

8 Heterogeneous Effects

8.1 Results

As we expose in Subsection 7.2, this study finds positive and significant effects of the APRENDER program on the treated schools' academic outcomes. Besides finding these effects, the question remains whether heterogeneity exists inside them and whether some groups are more or less affected than others. We run the main regressions for academic outcomes from Subsection 7.2 for two openings of the data: (1) females and males, and (2) students with an *Aristas* sociocultural index below and above the median within the classroom.

Table 6 shows the output from the regressions on academic outcomes for males and females, respectively. As can be seen, while females show a positive and significant effect of treatment on their Math score of 0.34 standard deviations, males do not present significance. This result hints that the effect on females drives the previously estimated impact of APRENDER for all students. On the other hand, both females and males show a positive and significant effects of treatment on their Language test scores, where for females, the increase is higher than for males: 0.37 versus 0.28 standard deviations. Thus, the general effect of treatment on Language tests found previously seems to be driven by both genders.

On its part, when we conduct estimations for groups of students according to the level of their *Aristas* sociocultural index. In each class group of the sample, students are assigned to one or the other category if their index is higher or lower than the group's median. Both groups with high and low *Aristas* index show positive and significant effects of treatment on their scores in Math and Language. In the case of Language tests, the effect is similar for both groups, being slightly bigger for the group with high index: 0.35 and 0.33 standard deviations. On the contrary, for Math scores, the situation is disparate. Whereas for the group with high index, the effect is 0.44 standard deviations and significant at 1%, the effect is 0.25 standard deviations and significant at 10% for the group with low index. Thus, for Math tests, the impact of APRENDER appears to be driven in a bigger way by the students with the best socioeconomic background.

8.2 Robustness Analysis

As it is done in Subsection 7.4 with the main results of Sections 7.1 & 7.2, a robustness analysis is conducted to enlarge the validity of the heterogeneous effects presented in Subsection

Table 6: **Effect of APRENDER on Academic Outcomes - heterogeneous effects**

	Math Score by gender		Language Score by gender		Math Score by *Aristas* index		Language Score by *Aristas* index	
	(1) Males	(2) Females	(3) Males	(4) Females	(5) Low index	(6) High index	(7) Low index	(8) High index
Conventional	0.172	0.338**	0.284**	0.370***	0.248	0.444***	0.327***	0.351***
	(0.148)	(0.163)	(0.112)	(0.120)	(0.154)	(0.138)	(0.124)	(0.115)
	[-0.118,0.462]	[0.019,0.656]	[0.065,0.504]	[0.135,0.606]	[-0.053,0.550]	[0.173,0.715]	[0.084,0.570]	[0.125,0.576]
Bias-corrected	0.207	0.401**	0.338***	0.404***	0.305**	0.510***	0.385***	0.362***
	(0.148)	(0.163)	(0.112)	(0.120)	(0.154)	(0.138)	(0.124)	(0.115)
	[-0.083,0.497]	[0.082,0.719]	[0.118,0.557]	[0.168,0.639]	[0.004,0.607]	[0.239,0.781]	[0.142,0.627]	[0.137,0.587]
Robust	0.207	0.401**	0.338***	0.404***	0.305*	0.510***	0.385***	0.362***
	(0.179)	(0.189)	(0.130)	(0.138)	(0.180)	(0.162)	(0.139)	(0.138)
	[-0.143,0.558]	[0.031,0.771]	[0.082,0.593]	[0.133,0.675]	[-0.047,0.658]	[0.192,0.827]	[0.111,0.658]	[0.092,0.632]
Controls:								
Grade FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Kernel	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular
Bandwidth Selection	MSE-optimal	MSE-optimal	MSE-optimal	MSE-optimal	MSE-optimal	MSE-optimal	MSE-optimal	MSE-optimal
Order Loc. Poly. (p)	1	1	1	1	1	1	1	1
Mean Dep. Var.	5.867	5.946	5.761	6.013	5.774	6.078	5.765	6.033
SD Dep. Var.	0.938	0.914	0.963	0.955	0.881	0.954	0.911	1.004
Observations	5,564	5,614	5,567	5,624	4,427	4,464	4,404	4,472
Eff. Obs. at the Left ; Right	685 ; 1047	1183 ; 1139	557 ; 960	650 ; 903	642 ; 855	584 ; 787	572 ; 790	459 ; 738
Eff. Schools at the Left ; Right	19 ; 27	30 ; 29	14 ; 25	17 ; 25	22 ; 28	19 ; 27	19 ; 27	13 ; 25

Notes: The Table reports the RD specification estimates associating math and language tests results with the ICSC index. Dependent variables are the results from Aristas Math and Language standardized tests conducted by INEEd in 2017 and 2020 to third and sixth graders. Specifications (1)-(4) run regressions separately for males and females. (5)-(8) run regressions separately for the students with a higher or lower *Aristas* index than the median of their respective class group. The table reports three different estimates for each estimation: Conventional, Bias-Corrected, and Robust-Bias-Corrected. According to Cattaneo et al. (2020), the estimate considered is the Conventional, while the Confidence Interval and p-value of the Robust-Bias-Corrected estimate are taken into account for inference; see text for details. The ICSC index measures the vulnerability of the area where the school is located according to socio-economic indicators; see text for details. It is rescaled in such a way that a school is eligible to be APRENDER if its index is higher than zero; otherwise, it should be UC. All specifications implement a sharp RD design due to perfect compliance. Grade, year, and region fixed effects are implemented in every specification. Clusters at the school level are taken in every specification. Kernel indicates how the observations are weighted. Bandwidth Selection indicates the criteria used to choose bandwidth. Order Loc. Poly. (p) indicates the order of the local polynomial used for the estimation. The mean and standard deviation of the dependent variable are measured inside the bandwidth used for the estimation. Effective observations are those that are taken into account in local estimations. Standard errors in parenthesis. Confidence Intervals in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

8.1. We run two tests in this Section: Donut Hole and Sensitivity to different specifications. Results are included in Appendix G.

The estimated impact of APRENDER on Language scores for males appears to be robust, as significance sustains for the tests conducted. On its part, the effect of treatment on Language tests for females also appears to be robust to some degree. In the case of Math scores, the impact for females appears to be sufficiently robust.

The effect of treatment on Math scores for the students with low sociocultural context index appears to be not much robust. On the other hand, the impact on Language scores for this group of students sustains considerably both its significance and magnitude. In the same sense, the effect found on Math scores for the students with high *Aristas* index appears to be considerably robust. The same conclusion can be drawn for the estimated effect on Language score for the mentioned group.

9 Mechanisms

9.1 Results

We perform an exploratory analysis of mechanisms by evaluating the impact of the program on intermediate outputs -at the school, teacher, and family level- that might explain the positive results from Section 7. This analysis might help us understand which may be the active channels driving the effects. The theoretical model from Appendix H frames our analysis in this Section.

Each one of the main features of APRENDER -PODES Projects, *Salas Docentes* and *Trayectorias Protegidas*- might be contributing to the positive impacts of the program. As no data is available to identify those students that are part of *Trayectorias Protegidas*, we cannot test whether it is contributing to the estimated effects of the program. On its part, there are ways to answer questions about the impulse that PODES Projects and *Salas Docentes* meetings are giving to the APRENDER program. The following lines focus on this task.

Table 7: **Effect of APRENDER on teachers' Main Qualities and Beliefs**

	Main Characteristics			Beliefs		
	(1) teacher years	(2) teacher years in school	(3) effective labor	(4) bond teachers-princ.	(5) bond teachers	(6) good dialogue with fam.
Conventional	2.122	-0.512	-0.183	-0.284	-0.755*	-0.063
	(2.815)	(2.552)	(0.175)	(0.273)	(0.398)	(0.076)
	[-3.394,7.639]	[-5.513,4.489]	[-0.526,0.160]	[-0.819,0.251]	[-1.536,0.025]	[-0.212,0.087]
Bias-corrected	0.840	-0.724	-0.251	-0.311	-0.822**	-0.079
	(2.815)	(2.552)	(0.175)	(0.273)	(0.398)	(0.076)
	[-4.676,6.357]	[-5.725,4.277]	[-0.593,0.092]	[-0.846,0.224]	[-1.602,-0.042]	[-0.228,0.070]
Robust	0.840	-0.724	-0.251	-0.311	-0.822*	-0.079
	(2.972)	(3.004)	(0.195)	(0.316)	(0.449)	(0.085)
	[-4.984,6.665]	[-6.611,5.164]	[-0.634,0.133]	[-0.930,0.308]	[-1.701,0.057]	[-0.246,0.089]
Controls:						
Grade FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes	Yes	Yes
Kernel	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular
Bandwidth Selection	MSE-optimal	MSE-optimal	MSE-optimal	MSE-optimal	MSE-optimal	MSE-optimal
Order Loc. Poly. (p)	1	1	1	1	1	1
Mean Dep. Var.	11.000	5.409	0.556	0.073	0.041	0.944
SD Dep. Var.	7.890	5.905	0.498	1.007	0.963	0.231
Observations	435	434	436	433	433	433
Eff. Obs. at the Left ; Right	41 ; 76	84 ; 112	29 ; 68	73 ; 89	41 ; 76	46 ; 82
Eff. Schools at the Left ; Right	19 ; 27	35 ; 36	13 ; 24	30 ; 29	19 ; 27	22 ; 28

Notes: The Table reports the RD specification estimates associating teachers' main characteristics and beliefs with the ICSC index. The table reports three different estimates for each estimation: Conventional, Bias-Corrected, and Robust-Bias-Corrected. According to Cattaneo et al. (2020), the estimate considered is the Conventional, while the Confidence Interval and p-value of the Robust-Bias-Corrected estimate are taken into account for inference; see text for details. Dependent variables are teacher's antiquety in years as teacher, teacher's antiquety in school in years, whether the teacher is effective, an index of teacher's belief of the relationship between teachers and the principal, an index of teacher's belief of the relationship between teachers, and whether there is good dialogue with students' families. The ICSC index measures the vulnerability of the area where the school is located according to socio-economic indicators; see text for details. It is rescaled in such a way that a school is eligible to be APRENDER if its index is higher than zero; otherwise, it should be UC. All specifications have a sharp RD design due to perfect compliance. Grade, year and region fixed effects are implemented in every specification. Data available for third and sixth graders' teachers in 2017 and 2020. Substitute teachers are not taken into account. Clusters at the school level are taken in every specification. Kernel indicates how the observations are weighted. Bandwidth Selection indicates the criteria used to choose bandwidth. Order Loc. Poly. (p) indicates the order of the local polynomial used for the estimation. The mean and standard deviation of the dependent variable are measured inside the bandwidth used for the estimation. Effective observations are those that are taken into account in local estimations. Standard errors in parenthesis. Confidence Intervals in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

The PODES Projects might be one of the mechanisms that allow for better grade retention performance and academic outcomes for treated schools for the last period (2017-2020). This paper tests the abrupt change in the probability of receiving funding for a PODES project. Column (1) in Table 56 shows this analysis for the total sample of schools in 2017-2019. APRENDER schools are 79 percentage points more likely to have a PODES project than UC schools (significant at 1% level). Consistently, Column (2) outlines a significant 58 percentage points increase in the likelihood of having a PODES when restricting to *Aristas* sample in 2017 and 2020. These results effectively show a clear discontinuity in the assignment of PODES Projects along the cutoff. These results show robustness, as outlined in Subsection 9.2.

Salas Docentes, as indicated in Section 3, are mandatory every month for APRENDER schools, whereas just twice a year for UC schools. Our model suggests that this encourages a higher level of School Crewing, which would imply a change in different aspects relating to beliefs and elections from students, families, and teachers. In the following lines, this study will evaluate changes due to the APRENDER program in different variables concerning these aspects. By doing this, we can acknowledge the potential channels through which School Crewing might affect students' outcomes.

Regarding teachers' qualities, differences are tested along the cutoff respecting: (1) their experience as teachers, (2) their experience as teachers in the current school, and (3) if their current labor as teachers is effective. Columns (1)-(3) in Table 7 show there is no significant effect of APRENDER along the cutoff on such characteristics, which means that APRENDER schools do not appear to be attracting more experienced teachers nor keeping them more years relative to UC schools.

On its part, teachers' beliefs appear to follow a similar pattern to their qualities, which may seem striking. Columns (4)-(6) in Table 7 illustrate there are no significant effects on teachers' perceived relationship with the principal or with families. However, there is a negative 10% significant effect of being in an APRENDER school on the perceived relationship between teachers. This result may come as surprising at first. Nonetheless, it can be explained as a consequence of *Salas Docentes* meetings: sharing more time and instances with fellow teachers can improve coordination, but it may also lead to more discrepancies between them.

As our model reflects, self-training may reveal the intrinsic motivation of teachers. Results in Table 8 address this point. First, there are no significant effects of APRENDER on whether teachers went more frequently to training instances, either school-specific or non-school-specific. In the same sense, there are no significant differences in the current self-

Table 8: **Effect of APRENDER on Teachers' Training, Pedagogy and School Practices**

	Current Training					Pedagogy		School Practices
	(1) up-to-date any subj.	(2) up-to-date lang.	(3) up-to-date math	(4) any tr. instance	(5) school tr. instance	(6) language HW	(7) math HW	(8) parent meetings
Conventional	0.434	0.466*	0.983***	0.179	-0.141	-0.188**	-0.220***	0.512**
	(0.305)	(0.248)	(0.225)	(0.169)	(0.153)	(0.090)	(0.084)	(0.204)
	[-0.165,1.032]	[-0.020,0.952]	[0.542,1.424]	[-0.153,0.511]	[-0.440,0.158]	[-0.365,-0.011]	[-0.383,-0.056]	[0.113,0.912]
Bias-corrected	0.508*	0.525**	1.122***	0.190	-0.160	-0.207**	-0.244***	0.525**
	(0.305)	(0.248)	(0.225)	(0.169)	(0.153)	(0.090)	(0.084)	(0.204)
	[-0.091,1.107]	[0.039,1.010]	[0.681,1.563]	[-0.142,0.522]	[-0.459,0.140]	[-0.383,-0.030]	[-0.408,-0.080]	[0.125,0.924]
Robust	0.508	0.525*	1.122***	0.190	-0.160	-0.207**	-0.244***	0.525**
	(0.345)	(0.273)	(0.239)	(0.196)	(0.177)	(0.103)	(0.094)	(0.243)
	[-0.168,1.184]	[-0.010,1.060]	[0.654,1.591]	[-0.193,0.573]	[-0.507,0.188]	[-0.408,-0.006]	[-0.428,-0.060]	[0.048,1.002]
Controls:								
Grade FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Kernel	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular
Bandwidth Selection	MSE-optimal	MSE-optimal	MSE-optimal	MSE-optimal	MSE-optimal	MSE-optimal	MSE-optimal	MSE-optimal
Order Loc. Poly. (p)	1	1	1	1	1	1	1	1
Mean Dep. Var.	0.606	0.361	0.391	0.768	0.476	0.899	0.907	0.265
SD Dep. Var.	0.490	0.483	0.491	0.423	0.501	0.302	0.292	0.446
Observations	258	258	258	332	332	293	291	158
Eff. Obs. at the Left ; Right	43 ; 52	24 ; 45	16 ; 40	72 ; 86	34 ; 59	49 ; 65	23 ; 54	21 ; 28
Eff. Schools at the Left ; Right	26 ; 27	17 ; 25	11 ; 22	37 ; 36	19 ; 26	31 ; 30	20 ; 27	20 ; 25

Notes: The Table reports the RD specification estimates associating teachers' current training, pedagogy and frequency of parent meetings with the ICSC index. The table reports three different estimates for each estimation: Conventional, Bias-Corrected, and Robust-Bias-Corrected. According to Cattaneo et al. (2020), the estimate considered is the Conventional, while the Confidence Interval and p-value of the Robust-Bias-Corrected estimate are taken into account for inference; see text for details. Dependent variables regarding teachers' current training are whether teachers have been highly up-to-date with any subject in the last month, whether have been highly up-to-date in language, whether have been highly up-to-date in math, whether teachers went frequently to any training instances, whether teachers went frequently to school training instances. On its part, the other dependent variables are whether the teacher sends math and language homework and whether the school has monthly parent meetings. The ICSC index measures the vulnerability of the area where the school is located according to socio-economic indicators; see text for details. It is rescaled in such a way that a school is eligible to be APRENDER if its index is higher than zero; otherwise, it should be UC. All specifications have a sharp RD design due to perfect compliance. Grade, year and region fixed effects are implemented in almost every specification. Parent meetings has no grade fixed effects since is at school level. Data available for third and sixth graders in 2017 and 2020 for teacher outcomes. Substitute teachers are not taken into account. Clusters at the school level are taken in every specification. Kernel indicates how the observations are weighted. Bandwidth Selection indicates the criteria used to choose bandwidth. Order Loc. Poly. (p) indicates the order of the local polynomial used for the estimation. The mean and standard deviation of the dependent variable are measured inside the bandwidth used for the estimation. Effective observations are those that are taken into account in local estimations. Standard errors in parenthesis. Confidence Intervals in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

training of teachers when considering all the subjects in the curricula. Nevertheless, when the self-training is referred only to language or math -the core subjects of the program- the effects are significant. Teachers in APRENDER schools are 47 and 98 percentage points respectively more prone to be up-to-date compared to teachers in UC schools near the cutoff. They do not attend differently to training courses, but they individually train themselves in the core subjects of APRENDER: language and math. While training instances from school or other institutions tend to be a group decision, self-training is a personal choice of each teacher. Thus, the change in self-training might reflect that teachers are intrinsically more motivated. More interesting, this self-training is in the core subjects of APRENDER. Therefore, this might show that the higher motivation is aligned with the program agenda. Furthermore, the teacher's pedagogy is a key channel through which kids could have achieved higher cognitive skills thanks to APRENDER. APRENDER teachers are respectively 19 and 22 percentage points less likely than UC teachers to send language and math homework to their students. Both results show high significance. Additionally, there is a relevant and significant effect of about 51 percentage points at a 5% significance level on the probability of having monthly meetings with the student's parents. This result goes in line with the hypothesis presented in our model, where *Salas Docentes* were attributed the capability of fostering school interactions with parents. Then, results suggest that teachers are more self-trained in the program's core subjects, change their pedagogy regarding sending homework, and interact more frequently with families. Teacher quality has changed due to treatment, but not due to attracting more those with more experience. The increase in the quality came from the current staff. Although we cannot demonstrate a causal relationship, our theoretical model leads us to think that this higher teacher quality and interaction with families is due to the effect of more *Salas Docentes* meetings.

Table 9: **Effect of APRENDER on Parents' Expectation of their Kids and Beliefs Regarding School**

	Expectation of their Kids			Beliefs on School and Involvement			
	(1) high school	(2) tertiary studies	(3) more than them	(4) attitude fam. part.	(5) relation fam.-school	(6) CF valuation	(7) part of CF
Conventional	0.060	0.068*	0.068**	0.163	-0.003	0.248*	0.011
	(0.053)	(0.038)	(0.030)	(0.172)	(0.084)	(0.142)	(0.064)
	[-0.044,0.164]	[-0.007,0.143]	[0.009,0.126]	[-0.175,0.500]	[-0.167,0.161]	[-0.031,0.527]	[-0.115,0.137]
Bias-corrected	0.073	0.084**	0.079***	0.165	-0.065	0.283**	0.020
	(0.053)	(0.038)	(0.030)	(0.172)	(0.084)	(0.142)	(0.064)
	[-0.031,0.177]	[0.009,0.159]	[0.020,0.137]	[-0.173,0.503]	[-0.228,0.099]	[0.004,0.562]	[-0.105,0.146]
Robust	0.073	0.084*	0.079**	0.165	-0.065	0.283*	0.020
	(0.062)	(0.046)	(0.037)	(0.200)	(0.118)	(0.165)	(0.077)
	[-0.049,0.195]	[-0.007,0.174]	[0.006,0.151]	[-0.226,0.556]	[-0.296,0.167]	[-0.041,0.607]	[-0.131,0.172]
Controls:							
Grade FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	No	No	No	Yes
Region FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Kernel	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular
Bandwidth Selection	MSE-optimal	MSE-optimal	MSE-optimal	MSE-optimal	MSE-optimal	MSE-optimal	MSE-optimal
Order Loc. Poly. (p)	1	1	1	1	1	1	1
Mean Dep. Var.	0.609	0.224	0.772	-0.072	-0.262	-0.088	0.866
SD Dep. Var.	0.488	0.417	0.420	1.009	1.007	1.001	0.341
Observations	8,070	8,070	8,010	3,377	3,914	2,197	5,851
Eff. Obs. at the Left ; Right	1404 ; 1692	1626 ; 1732	537 ; 1248	650 ; 725	216 ; 642	230 ; 373	1533 ; 1626
Eff. Schools at the Left ; Right	26 ; 29	31 ; 30	10 ; 22	15 ; 16	4 ; 12	9 ; 14	42 ; 38

Notes: The Table reports the RD specification estimates associating parents' expectations of their kids and beliefs regarding school with the ICSC index. The table reports three different estimates for each estimation: Conventional, Bias-Corrected, and Robust-Bias-Corrected. According to Cattaneo et al. (2020), the estimate considered is the Conventional, while the Confidence Interval and p-value of the Robust-Bias-Corrected estimate are taken into account for inference; see text for details. Dependent variables regarding parents' beliefs on their children are a dummy whether parents believe their kid will end High School, whether their kid will obtain tertiary studies, a dummy measuring whether such expectation is higher than what they have achieved as students. Dependent variables regarding parents' beliefs and involvement with school are an index of the attitudes of families towards families' participation in school, an index capturing the relationship between families and school according to the family of the student, an index of the family's valuation of *Comisión de Fomento*, and whether they have been part of it. The ICSC index measures the vulnerability of the area where the school is located according to socio-economic indicators; see text for details. It is rescaled in such a way that a school is eligible to be APRENDER if its index is higher than zero; otherwise, it should be UC. All specifications have a sharp RD design due to perfect compliance. Grade, year and region fixed effects are implemented in every specification. Data available for 2017 and 2020 for most all variables with year fixed effects. Those without year fixed effects have data available only for 2017. Clusters at the school level are taken in every specification. Kernel indicates how the observations are weighted. Bandwidth Selection indicates the criteria used to choose bandwidth. Order Loc. Poly. (p) indicates the order of the local polynomial used for the estimation. The mean and standard deviation of the dependent variable are measured inside the bandwidth used for the estimation. Effective observations are those that are taken into account in local estimations. Standard errors in parenthesis. Confidence Intervals in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Our model portrays that beliefs and involvement from families with their students may have experienced a change due to APRENDER. Table 9 reflects treatment effects regarding parents' expectations of their kids. Parents with kids in an APRENDER school are 7 percentage points more likely to believe that their kids will obtain tertiary studies with a significance level of 10%. Moreover, parents from an APRENDER school are 7 percentage points more likely to believe their kids will get a higher educational degree than themselves, with a significance level of 5%. On the other hand, there is no differential effect for APRENDER parents on the expectation of their kids to finish high school. Furthermore, as Columns (4)-(5) in Table 9 illustrate, there is no significant difference between APRENDER and UC parents regarding their beliefs about family participation and relationship with the school. Columns (6)-(7) show a similar pattern, analyzing parents' valuation and participation in *Comisión de Fomento* (CF), which is a school organism that has a supporting and supervising role towards the school. Parents from APRENDER do not show differential participation in this organism relative to UC schools' parents. A positive and significant effect at 10% only arises for the valuation of CF, but as seen in Subsection 9.2, this result fails to show robustness. This fact does not contradict what we state in our model. Parents with kids in APRENDER schools may have a higher expectation of their kids. Still, they do not

necessarily have to believe that their direct participation in school life is necessary.

Table 10: **Effect of APRENDER on Parents' Involvement and Supervision on Kids**

	Parents' Direct Involvement		Parents' Supervision	
	(1) Read to Kid	(2) Help Kid with HW	(3) Sure Kid Does HW	(4) Ask what Kid Learns
Conventional	0.030	-0.007	0.022	0.006
	(0.041)	(0.026)	(0.034)	(0.055)
	[-0.050,0.110]	[-0.059,0.044]	[-0.045,0.089]	[-0.101,0.114]
Bias-corrected	0.035	-0.001	0.033	0.020
	(0.041)	(0.026)	(0.034)	(0.055)
	[-0.046,0.115]	[-0.053,0.050]	[-0.034,0.100]	[-0.087,0.128]
Robust	0.035	-0.001	0.033	0.020
	(0.048)	(0.033)	(0.041)	(0.067)
	[-0.060,0.129]	[-0.066,0.063]	[-0.048,0.114]	[-0.111,0.151]
Controls:				
Grade FE	Yes	Yes	Yes	Yes
Year FE	Yes	No	No	No
Region FE	Yes	Yes	Yes	Yes
Kernel	Triangular	Triangular	Triangular	Triangular
Bandwidth Selection	MSE-optimal	MSE-optimal	MSE-optimal	MSE-optimal
Order Loc. Poly. (p)	1	1	1	1
Mean Dep. Var.	0.373	0.813	0.914	0.896
SD Dep. Var.	0.484	0.390	0.280	0.305
Observations	8,204	4,430	4,511	4,396
Eff. Obs. at the Left ; Right	1242 ; 1613	520 ; 831	571 ; 914	611 ; 888
Eff. Schools at the Left ; Right	24 ; 28	9 ; 14	10 ; 15	11 ; 15

Notes: The Table reports the RD specification estimates associating parents' direct involvement and supervision on their kids with the ICSC index. The table reports three different estimates for each estimation: Conventional, Bias-Corrected, and Robust-Bias-Corrected. According to Cattaneo et al. (2020), the estimate considered is the Conventional, while the Confidence Interval and p-value of the Robust-Bias-Corrected estimate are taken into account for inference; see text for details. Dependent variables are whether parents read books to kids, whether parents help kids with homework, whether parents make sure their kid has done HW and whether they ask kid what is learning. The ICSC index measures the vulnerability of the area where the school is located according to socio-economic indicators; see text for details. It is rescaled in such a way that a school is eligible to be APRENDER if its index is higher than zero; otherwise, it should be UC. All specifications have a sharp RD design due to perfect compliance. Grade, year and region fixed effects are implemented in every specification. Data only available for 2017 for the dummy whether parents help kids with homework. Clusters at the school level are taken in every specification. Kernel indicates how the observations are weighted. Bandwidth Selection indicates the criteria used to choose bandwidth. Order Loc. Poly. (p) indicates the order of the local polynomial used for the estimation. The mean and standard deviation of the dependent variable are measured inside the bandwidth used for the estimation. Effective observations are those that are taken into account in local estimations. Standard errors in parenthesis. Confidence Intervals in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

As Table 10 reflects, parents' direct involvement and supervision of kids between treated and control schools also do not experience significant changes.

We test whether another source might explain the effect of the APRENDER program other than *Salas Docentes* meetings, PODES Projects, and *Trayectorias Protegidas*. Table 56 in Appendix I outlines that APRENDER schools near the cutoff are not more likely to have Scholar Nutrition, PMC, or Educational Camps. However, it seems that APRENDER

schools are less likely to have an Orchard program and be part of *Escuelas Disfrutables*[13]. Despite that, in Appendix J we show that such results are not robust enough (especially for the Orchard program). Thus, these results illustrate that there are no special programs in APRENDER other than *Salas Docentes*, PODES, and *Trayectorias Protegidas*. The lack of significance of these estimations is in line with the feasible APRENDER channels we suggest in our model.

Overall, we hypothesize that one mechanism behind the APRENDER effect are teachers. The impulse of the higher number of meetings may be triggering School Crewing, resulting in a different pedagogy and more self-training in core subjects. Teachers increased motivation thanks to School Crewing might explain such changes. The extra meetings might have induced higher cooperation levels, allowing an alignment between teachers' motivation & actions and the objectives of the program. Besides, this impulse in School Crewing -precisely due to the increase in the interaction between teachers and parents- may also affect parents' beliefs about their kids' future education. However, this change appears not to be translating into higher investments. Equally, we recognize that PODES and *Trayectorias Protegidas* may be impacting students' academic outcomes.

9.2 Robustness Analysis

As it was done in Section 7.4 with the main results of this work, this section contains a robustness analysis to enlarge the validity of the mechanisms presented in Subsection 9.1. Tables are available in Appendix J. We conduct two tests for *Aristas* variables: Donut Hole and Sensitivity to different specifications. We also run a Placebo Cutoff analysis for the results on the PODES dummy for the total sample of schools due to the higher number of observations available.

The discontinuity in the PODES dummy for 2017-2019 in the total ANEP sample of schools shows robust results for all the tests we conduct. On its part, we perform the robustness analysis for the PODES assignment in 2017 and 2020 only including the *Aristas* sample. Although this specification seems sensitive to removing observations closest to the cutoff, it shows stability when different specifications are performed, both in magnitude and significance. Thus, the results for PODES regressions for *Aristas* sample appear to be sufficiently robust for the main tests performed. Hence, it cannot be discarded that PODES Projects are playing a role in the positive effects that APRENDER is generating both for

[13]Being part of the *Escuelas Disfrutables* program implies being visited by an itinerant multidisciplinary team conformed of psychologists and social workers.

ANEP and *Aristas* outcomes.

Although the effect on the probability of having monthly parent meetings disappears when local observations are not considered, the result's magnitude and significance are not sensitive to different specifications. Therefore, it seems that APRENDER schools show, to some degree, a robust higher probability of having monthly parent meetings. The decrease in the expected relationship between teachers according to them shows enough robustness. As we explain in Subsection 9.1, the fact that teachers from APRENDER schools have worse beliefs about the relationship between teachers does not oppose what we hypothesize in our model. On its part, while current self-training in math seems quite robust, the robustness for language is weaker. Moreover, the lower likelihood of sending math and language homework in APRENDER schools appears to be robust to some degree. This reflects a change in teachers' pedagogy. These findings, together with those in Subsection 9.1 regarding teacher self-training and pedagogy practices in APRENDER core subjects, align to some degree with our theoretical model and APRENDER objectives.

The higher expectation of parents on their kids' future education shows robustness to some degree. While the belief in achieving tertiary education resists all the robustness checks, the expectation that children will reach higher levels of education than them is sensitive to local observations. This highlights that APRENDER schools may affect parents' expectations of their kids. On the other hand, the program's positive effect on the family valuation of *Comisión de Fomento* shows a lack of robustness. Both tests performed reflect that the significance of this estimation is not persistent.

10 Final Remarks

We find significant and sizeable effects of the APRENDER school program on student outcomes through implementing a Regression Discontinuity Design. A significant and robust reduction of 2.3 percentage points in grade retention arises for the last period analyzed (2017-2019). Given that the average for this variable within the bandwidth is 4.0%, the magnitude of the effect seems important. The first schooling cycle (first to third grade) appears to be driving this result. No clear impacts appear for insufficient attendance and dropout.

This is the first paper that uses the standardized tests conducted by *Aristas* in 2017 and 2020 to third and sixth graders. We evaluate the impact of APRENDER on cognitive and non-cognitive measures from this survey. APRENDER students score 0.31 standard deviations higher than those from UC schools in Language tests. Students from sixth grade show a higher impact than those from third grade. Sixth-grade students also experience an increase in their Math scores. Furthermore, when a heterogeneous analysis is conducted, the groups that seem to get higher gains from the program are females and the students with the highest sociocultural background within the classroom.

There is no evidence in the literature about the effects of this kind of program on students' socio-emotional behavior. We find no significant impact on the following scores measured by *Aristas* survey: (1) Belonging, (2) Interpersonal Abilities, (3) Intrapersonal Abilities, and (4) Motivation & Learning Self-Regulation.

As stated in Section 3, APRENDER is composed of three initiatives: (1) extending the number of teacher meetings, (2) providing in-kind resources to schools, and (3) adding special teachers to provide remedial education. In this paper, we cannot individually estimate the contribution of each of these initiatives, and the mentioned effects are for the whole APRENDER program. We cannot discard that any of these initiatives are playing a role in the estimated results. However, our mechanisms analysis studies the effect of APRENDER on different intermediate outcomes, which can hypothetically shed light on the channels behind the extension of the number of teacher meetings. APRENDER schools do not seem to attract or keep more experienced teachers than UC. However, APRENDER teachers show a significant and relatively robust increase in their current self-training in math and language, which are the core subjects of the program. In addition, teachers tend to send less math and language homework, outlining a change in their pedagogy. Also, treated schools implement more frequent parent meetings. These changes may reveal an increase in their motivation, as we reflected in our theoretical model. We hypothesize that teacher cooperation and sharing

of knowledge -a concept labeled in this paper as School Crewing- may be impulsing these effects. The mandatory increase in the number of teacher meetings may be increasing this factor. Moreover, we find positive effects of APRENDER on parents' expectations about their kids' future skills. The higher level of interaction with the school might explain this. Nevertheless, this increase in parents' expectations appears not to be sufficiently high, as there is no change in parents' investments in their kids.

Our findings deliver important insights for future investigation. We show that a school program of the kind of APRENDER affects elections from teachers that might reflect an increase in their motivation. Further research is needed to understand better the role that teacher motivation and collaboration play in improving teacher quality and ultimately in improving student outcomes. Also, our results imply that a program of this type can impact parents' expectations of their kids' future skills. A deeper understanding of this channel is needed. Lastly, counting with richer data to exploit dynamic effects would be important to understand how the result varies depending on treatment intensity.

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A Appendix: Descriptive Statistics

Table 11: **Mean Difference for ANEP Database - 2020**

	APRENDER		UC		Difference	
	Mean	N	Mean	N	Mean Diff.	SE
The school belongs to Montevideo region (dummy)	0.37	1386	0.25	1620	0.12***	(0.02)
Total number of students enrolled in school	299.03	1386	262.73	1620	36.30***	(5.41)
Number of students per group	20.84	1386	21.10	1620	-0.26	(0.19)
Grade retention	6.65	1386	4.02	1620	2.62***	(0.17)
Dropout	76.03	1386	68.61	1620	7.42***	(0.96)
Insufficient attendance	23.97	1386	31.39	1620	-7.42***	(0.96)
ICSC 2015 urban index	1.10	1386	-0.65	1620	1.74***	(0.02)

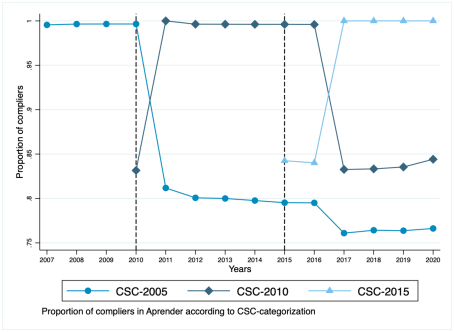
Notes: The Table reports mean differences between treated (APRENDER) and control (UC) groups for the main variables of ANEP database in 2020. This is an atypical year for the outcomes Dropout and Insufficient Attendance. These variables depend on thresholds of the number of days that students do not attend school. In 2020 due to the pandemic crisis education was not compulsory. Since thresholds of outcomes were not adapted, these outcomes are incomparable to other years. Grades are included from 1st to sixth. Each observation corresponds to one grade of one school at one year. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Table 12: **Descriptive Statistics of Mechanisms Variables**

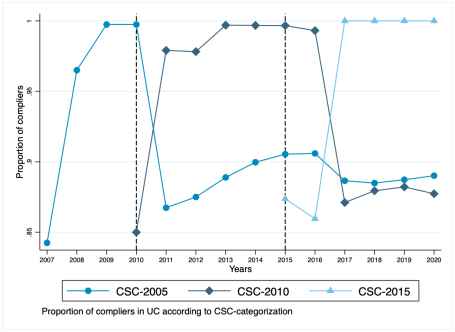
	Mean	SD	Min	Max	N
Panel A: Database - School level					
Assigned PODES project	0.35	0.48	0.00	1.00	2086
School has Educational Camps (dummy)	0.25	0.43	0.00	1.00	158
School has a Schol Nutrition Program (dummy)	0.84	0.37	0.00	1.00	158
School has an Orchard Program (dummy)	0.31	0.46	0.00	1.00	158
School is part of PMC: *Programa de Maestros Comunitarios* (dummy)	0.58	0.49	0.00	1.00	158
School is part of *Escuelas Disfrutables* Program (dummy)	0.70	0.46	0.00	1.00	158
School has monthly parent meetings (dummy)	0.23	0.42	0.00	1.00	158
Panel B: Database - Group level					
Headmaster-teachers relationship - teacher expectation (index)	0.07	1.00	-3.49	1.23	589
Relationship between teachers - teacher expectation (index)	0.02	1.00	-3.65	1.43	589
There is a good gialogue with families according to teacher (dummy)	0.96	0.19	0.00	1.00	588
Experience in years as teacher	13.68	8.91	0.00	43.00	591
Experience in years as teacher in the school	5.69	5.68	0.00	33.00	590
Labor of teacher is effective (dummy)	0.63	0.48	0.00	1.00	593
Teacher took a recent course to be up-to-date (dummy)	0.67	0.47	0.00	1.00	354
Teacher took a recent math course to be up-to-date (dummy)	0.42	0.49	0.00	1.00	354
Teacher took a recent language course to be up-to-date (dummy)	0.46	0.50	0.00	1.00	354
Teacher has received recent training (dummy)	0.79	0.41	0.00	1.00	457
Teacher has received recent training in school (dummy)	0.48	0.50	0.00	1.00	457
Teacher sends math homework (dummy)	0.94	0.24	0.00	1.00	430
Teacher sends language homework (dummy)	0.92	0.27	0.00	1.00	429
Panel C: Database - Student level					
Parents expect kid finishing High School (dummy)	0.67	0.47	0.00	1.00	8070
Parents expect kid finishing tertiary studies (dummy)	0.25	0.43	0.00	1.00	8070
Parents expect kid reaches a higher education than them (dummy)	0.73	0.45	0.00	1.00	8010
Parents read books to children (dummy)	0.40	0.49	0.00	1.00	8204
Parents help kids with homework (dummy)	0.81	0.39	0.00	1.00	4430
Parents make sure kid does homework (dummy)	0.93	0.25	0.00	1.00	4511
Parents asks kid what he/she is learning (dummy)	0.90	0.30	0.00	1.00	4396
Family attitude towards families' participation in school (index)	-0.09	1.00	-3.14	1.56	3377
Relationship between school and families - family expectation (index)	-0.25	1.00	-4.06	0.98	3914
Family valuation of *Comisión de Fomento* (index)	-0.08	1.00	-3.15	1.75	2197
Parents participated in *Comisión de Fomento* at least once (dummy)	0.88	0.32	0.00	1.00	5851

Notes: The table reports summary statistics for the variables used for the mechanisms analysis. Having a PODES assigned is the only variable from ANEP, ranging from 2017 to 2020 at school level. *Aristas* variables correspond to a survey conducted by INEEd in 2017 and 2020, selecting a sample of third and sixth graders. Each panel corresponds to a different aggregation level in a year. Only APRENDER and UC schools are included.

B Appendix: Graphical Analysis

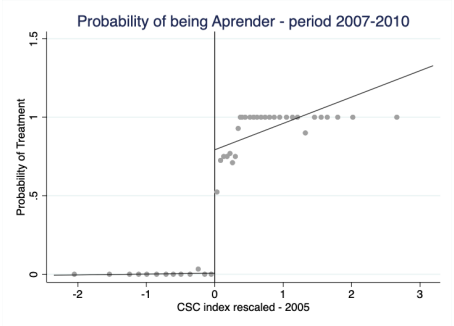


(a)

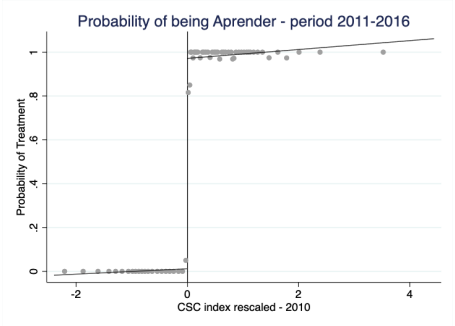


(b)

Figure 4: Proportion of compliers in Aprender and UC by year-index edition



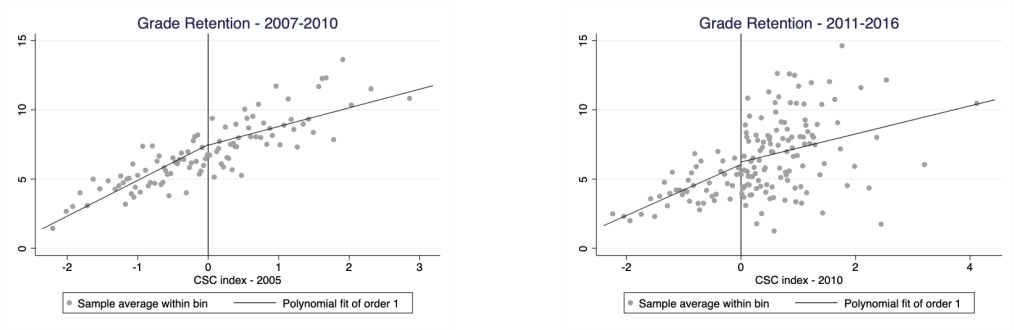
(a)



(b)

Figure 5: First stage graphs

C Appendix: The effect of APRENDER on schooling trajectories



(a) (b)

Figure 6: Effect of APRENDER on Grade Retention

Table 13: **Effect of APRENDER on schooling trajectories for 2007-2010**

	Grade Retention			Insufficient Attendance			Dropout		
	(1) all grades	(2) first cycle	(3) second cycle	(4) all grades	(5) first cycle	(6) second cycle	(7) all grades	(8) first cycle	(9) second cycle
Conventional	-1.710	-3.701	0.462	2.885	2.988	2.627	-0.143	0.334	-0.594
	(3.443)	(3.938)	(3.378)	(3.725)	(4.194)	(3.427)	(0.830)	(1.138)	(0.664)
	[-8.458,5.038]	[-11.419,4.017]	[-6.159,7.082]	[-4.416,10.186]	[-5.233,11.209]	[-4.090,9.344]	[-1.771,1.484]	[-1.896,2.564]	[-1.895,0.706]
Bias-corrected	-1.659	-3.735	0.588	3.211	3.435	2.769	-0.189	0.275	-0.595
	(3.443)	(3.938)	(3.378)	(3.725)	(4.194)	(3.427)	(0.830)	(1.138)	(0.664)
	[-8.407,5.089]	[-11.453,3.982]	[-6.032,7.208]	[-4.090,10.512]	[-4.786,11.655]	[-3.948,9.486]	[-1.816,1.439]	[-1.955,2.506]	[-1.896,0.706]
Robust	-1.659	-3.735	0.588	3.211	3.435	2.769	-0.189	0.275	-0.595
	(3.612)	(4.165)	(3.502)	(4.185)	(4.722)	(3.823)	(0.897)	(1.214)	(0.708)
	[-8.739,5.421]	[-11.899,4.429]	[-6.276,7.452]	[-4.991,11.413]	[-5.820,12.689]	[-4.724,10.261]	[-1.947,1.570]	[-2.103,2.654]	[-1.982,0.792]
Controls:									
Grade FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Kernel	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular
Bandwidth Selection	MSE-optimal	MSE-optimal	MSE-optimal	MSE-optimal	MSE-optimal	MSE-optimal	MSE-optimal	MSE-optimal	MSE-optimal
Order Loc. Poly. (p)	1	1	1	1	1	1	1	1	1
Mean Dep. Var.	6.859	10.139	3.651	7.729	9.217	6.351	1.194	1.316	1.055
SD Dep. Var.	7.805	8.404	5.436	7.890	8.684	6.737	3.781	4.713	2.544
Observations	16,209	8,103	8,106	16,209	8,103	8,106	16,209	8,103	8,106
Eff. Obs. at the Left ; Right	1554 ; 1062	753 ; 519	825 ; 555	1554 ; 1062	753 ; 519	909 ; 591	1506 ; 1038	753 ; 507	849 ; 567
Eff. Schools at the Left ; Right	66 ; 46	64 ; 45	70 ; 48	66 ; 46	64 ; 45	77 ; 51	64 ; 45	64 ; 44	72 ; 49

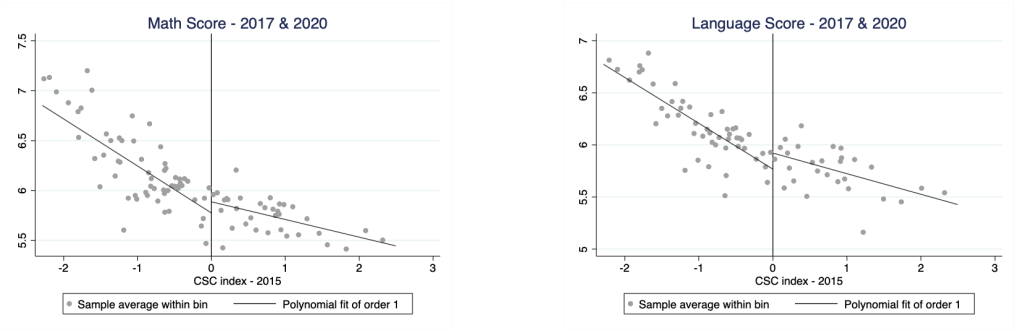
Notes: The Table reports the RD specification estimates associating Grade Retention, Insufficient Attendance, and Dropout with the ICSC index for 2007-2010. Grade Retention is defined as the percentage of students that were grade-retained. Insufficient Attendance is the percentage of students who attended more than 70 days but less than 140 days in the academic year. Dropout is the percentage of students who attended more than 70 days but less than 140 days in the academic year. Columns (1), (4), and (7) include all primary grades. (2), (5), and (8) only include first to third grade. (3), (6), and (9) only include fourth to sixth grade. The table reports three different estimates for each estimation: Conventional, Bias-Corrected, and Robust-Bias-Corrected. According to Cattaneo et al. (2020), the estimate considered is the Conventional, while the Confidence Interval and p-value of the Robust-Bias-Corrected estimate are taken into account for inference; see text for details. The ICSC index measures the vulnerability of the area where the school is located according to socio-economic indicators; see text for details. It is rescaled in such a way that a school is eligible to be APRENDER if its index is higher than zero; otherwise, it should be UC. All specifications implement a fuzzy RD design due to imperfect compliance. Grade, year, and region fixed effects are implemented in every specification. Clusters at the school level are taken in every specification. Kernel indicates how the observations are weighted. Bandwidth Selection indicates the criteria used to choose bandwidth. Order Loc. Poly. (p) indicates the order of the local polynomial used for the estimation. The mean and standard deviation of the dependent variable are measured inside the bandwidth used for the estimation. Effective observations are those that are taken into account in local estimations. Standard errors in parenthesis. Confidence Intervals in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Table 14: **Effect of APRENDER on schooling trajectories for 2011-2016**

	Grade Retention			Insufficient Attendance			Dropout		
	(1) all grades	(2) first cycle	(3) second cycle	(4) all grades	(5) first cycle	(6) second cycle	(7) all grades	(8) first cycle	(9) second cycle
Conventional	-0.162	-0.593	0.056	0.041	-0.180	0.290	-0.067	-0.068	-0.013
	(0.534)	(0.879)	(0.433)	(0.852)	(1.057)	(0.775)	(0.155)	(0.243)	(0.176)
	[-1.208,0.884]	[-2.316,1.129]	[-0.792,0.904]	[-1.629,1.710]	[-2.252,1.892]	[-1.228,1.808]	[-0.372,0.237]	[-0.544,0.407]	[-0.358,0.333]
Bias-corrected	-0.283	-0.766	0.076	-0.133	-0.505	0.282	-0.064	-0.114	0.104
	(0.534)	(0.879)	(0.433)	(0.852)	(1.057)	(0.775)	(0.155)	(0.243)	(0.176)
	[-1.329,0.763]	[-2.488,0.957]	[-0.772,0.924]	[-1.803,1.536]	[-2.576,1.567]	[-1.236,1.800]	[-0.368,0.240]	[-0.590,0.361]	[-0.241,0.450]
Robust	-0.283	-0.766	0.076	-0.133	-0.505	0.282	-0.064	-0.114	0.104
	(0.656)	(1.059)	(0.507)	(1.004)	(1.251)	(0.908)	(0.190)	(0.293)	(0.211)
	[-1.568,1.003]	[-2.841,1.309]	[-0.918,1.070]	[-2.102,1.835]	[-2.956,1.947]	[-1.499,2.062]	[-0.437,0.309]	[-0.688,0.459]	[-0.310,0.519]
Controls:									
Grade FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Kernel	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular
Bandwidth Selection	MSE-optimal	MSE-optimal	MSE-optimal	MSE-optimal	MSE-optimal	MSE-optimal	MSE-optimal	MSE-optimal	MSE-optimal
Order Loc. Poly. (p)	1	1	1	1	1	1	1	1	1
Mean Dep. Var.	5.652	8.654	2.576	7.881	9.173	6.584	0.784	0.740	0.717
SD Dep. Var.	7.485	8.719	4.325	8.839	9.553	7.841	2.600	2.583	2.051
Observations	21,203	10,601	10,602	21,203	10,601	10,602	21,203	10,601	10,602
Eff. Obs. at the Left ; Right	7554 ; 6492	2948 ; 2724	2603 ; 2547	4345 ; 4560	2171 ; 2280	2234 ; 2280	7410 ; 6420	2879 ; 2706	2516 ; 2547
Eff. Schools at the Left ; Right	253 ; 192	202 ; 160	180 ; 150	151 ; 135	151 ; 135	155 ; 135	249 ; 190	197 ; 159	174 ; 150

Notes: The Table reports the RD specification estimates associating Grade Retention, Insufficient Attendance, and Dropout with the ICSC index for 2011-2016. Grade Retention is defined as the percentage of students that were grade-retained. Insufficient Attendance is the percentage of students who attended more than 70 days but less than 140 days in the academic year. Dropout is the percentage of students who attended more than 70 days but less than 140 days in the academic year. Columns (1), (4), and (7) include all primary grades. (2), (5), and (8) only include first to third grade. (3), (6), and (9) only include fourth to sixth grade. The table reports three different estimates for each estimation: Conventional, Bias-Corrected, and Robust-Bias-Corrected. According to Cattaneo et al. (2020), the estimate considered is the Conventional, while the Confidence Interval and p-value of the Robust-Bias-Corrected estimate are taken into account for inference; see text for details. The ICSC index measures the vulnerability of the area where the school is located according to socio-economic indicators; see text for details. It is rescaled in such a way that a school is eligible to be APRENDER if its index is higher than zero; otherwise, it should be UC. All specifications implement a fuzzy RD design due to imperfect compliance. Grade, year, and region fixed effects are implemented in every specification. Clusters at the school level are taken in every specification. Kernel indicates how the observations are weighted. Bandwidth Selection indicates the criteria used to choose bandwidth. Order Loc. Poly. (p) indicates the order of the local polynomial used for the estimation. The mean and standard deviation of the dependent variable are measured inside the bandwidth used for the estimation. Effective observations are those that are taken into account in local estimations. Standard errors in parenthesis. Confidence Intervals in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

D Appendix: The effect of APRENDER on academic outcomes



(a) (b)

Figure 7: Effect of APRENDER on Academic Outcomes

E Appendix: Pre-treatment analysis tables

Table 15: **First stage using 2015 ICSC index - 2011-2016**

	ANEP	*Aristas*
	(1)	(2)
Conventional	0.179	0.232
	(0.118)	(0.253)
	[-0.053,0.411]	[-0.264,0.728]
Bias-corrected	0.137	0.192
	(0.118)	(0.253)
	[-0.095,0.369]	[-0.304,0.688]
Robust	0.137	0.192
	(0.136)	(0.302)
	[-0.131,0.405]	[-0.400,0.784]
Controls:		
Year FE	Yes	Yes
Region FE	Yes	Yes
Kernel	Triangular	Triangular
Bandwidth Selection	MSE-optimal	MSE-optimal
Order Loc. Poly. (p)	1	1
Mean Dep. Var.	0.470	0.420
SD Dep. Var.	0.499	0.494
Observations	3,184	862
Eff. Obs. at the Left ; Right	970 ; 782	194 ; 204
Eff. Schools at the Left ; Right	170 ; 134	33 ; 34

Notes: The Table reports the RD specification estimates associating Treatment condition in 2011-2016 period with the ICSC index from 2015. In both specifications, the dependent variable is the treatment condition of the school. The table reports three different estimates for each estimation: Conventional, Bias-Corrected, and Robust-Bias-Corrected. According to Cattaneo et al. (2020), the estimate considered is the Conventional, while the Confidence Interval and p-value of the Robust-Bias-Corrected estimate are taken into account for inference; see text for details. The ICSC index measures the vulnerability of the area where the school is located according to socio-economic indicators; see text for details. It is rescaled in such a way that a school is eligible to be APRENDER if its index is higher than zero; otherwise, it should be UC. Year and region fixed effects are implemented in every specification. Clusters at the school level are taken in every specification. Kernel indicates how the observations are weighted. Bandwidth Selection indicates the criteria used to choose bandwidth. Order Loc. Poly. (p) indicates the order of the local polynomial used for the estimation. The mean and standard deviation of the dependent variable are measured inside the bandwidth used for the estimation. Effective observations are those that are taken into account in local estimations. Standard errors in parenthesis. Confidence Intervals in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Table 16: **Effect on outcome variables using 2015 ICSC index - 2011-2016**

	Grade Retention		Dropout		Insufficient Attendance	
	(1) ANEP	(2) *Aristas*	(3) ANEP	(4) *Aristas*	(5) ANEP	(6) *Aristas*
Conventional	-11.699	-15.796	-1.403	-1.127	-7.217	-9.606
	(12.328)	(17.304)	(1.833)	(2.086)	(8.453)	(16.122)
	[-35.861,12.463]	[-49.712,18.119]	[-4.996,2.190]	[-5.215,2.961]	[-23.785,9.351]	[-41.204,21.993]
Bias-corrected	-15.567	-19.735	-2.100	-2.255	-12.303	-15.753
	(12.328)	(17.304)	(1.833)	(2.086)	(8.453)	(16.122)
	[-39.728,8.595]	[-53.650,14.181]	[-5.693,1.493]	[-6.343,1.834]	[-28.871,4.265]	[-47.352,15.845]
Robust	-15.567	-19.735	-2.100	-2.255	-12.303	-15.753
	(13.767)	(19.524)	(2.058)	(2.385)	(10.228)	(19.101)
	[-42.550,11.417]	[-58.000,18.531]	[-6.133,1.933]	[-6.930,2.421]	[-32.349,7.743]	[-53.190,21.683]
Controls:						
Grade FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes	Yes	Yes
Kernel	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular
Bandwidth Selection	MSE-optimal	MSE-optimal	MSE-optimal	MSE-optimal	MSE-optimal	MSE-optimal
Order Loc. Poly. (p)	1	1	1	1	1	1
Mean Dep. Var.	5.751	6.094	0.787	0.687	8.087	8.532
SD Dep. Var.	7.232	6.882	2.330	1.759	8.608	7.772
Observations	19,090	5,172	19,090	5,172	19,090	5,172
Eff. Obs. at the Left ; Right	4365 ; 3366	1272 ; 1332	2955 ; 2634	1020 ; 1080	5222 ; 4266	1056 ; 1152
Eff. Schools at the Left ; Right	128 ; 97	36 ; 37	87 ; 76	29 ; 30	153 ; 122	30 ; 32

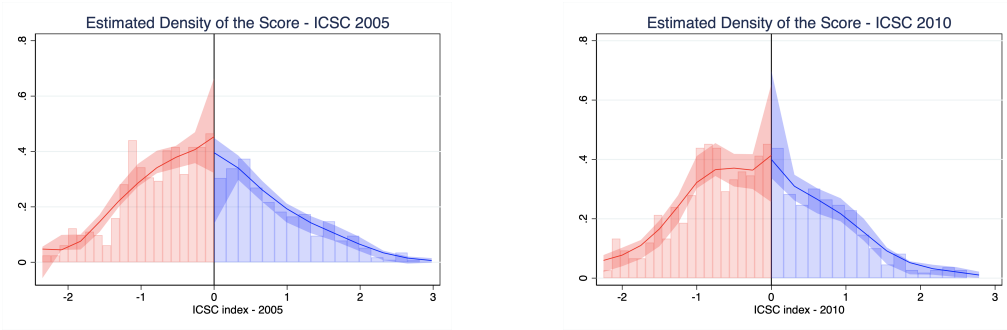
Notes: The Table reports the RD specification estimates associating Grade Retention, Insufficient Attendance, and Dropout from 2011-2016 period with the ICSC index from 2015. Grade Retention is defined as the percentage of students that were grade-retained. Insufficient Attendance is the percentage of students who attended more than 70 days but less than 140 days in the academic year. Dropout is the percentage of students who attended more than 70 days but less than 140 days in the academic year. Columns (2). (4), (6) only include the schools present in *Aristas* sample. The table reports three different estimates for each estimation: Conventional, Bias-Corrected, and Robust-Bias-Corrected. According to Cattaneo et al. (2020), the estimate considered is the Conventional, while the Confidence Interval and p-value of the Robust-Bias-Corrected estimate are taken into account for inference; see text for details. The ICSC index measures the vulnerability of the area where the school is located according to socio-economic indicators; see text for details. It is rescaled in such a way that a school is eligible to be APRENDER if its index is higher than zero; otherwise, it should be UC. All specifications apply a fuzzy RD design due to imperfect compliance. Grade, year, and region fixed effects are implemented in every specification. Clusters at the school level are taken in every specification. Kernel indicates how the observations are weighted. Bandwidth Selection indicates the criteria used to choose bandwidth. Order Loc. Poly. (p) indicates the order of the local polynomial used for the estimation. The mean and standard deviation of the dependent variable are measured inside the bandwidth used for the estimation. Effective observations are those that are taken into account in local estimations. Standard errors in parenthesis. Confidence Intervals in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

F Appendix: Robustness analysis

Table 17: **Density test for the running variable**

	ICSC 2005	ICSC 2010	ICSC 2015
Bias-corrected t-statistic	-1.64	0.45	0.57
p-value for bias-corrected density test	0.10	0.65	0.57
Effective Observations at the Left	301.00	188.00	117.00
Effective Observations at the Right	194.00	184.00	93.00

Notes: The Table reports the estimates for the manipulation testing using the local polynomial density estimators proposed in Cattaneo, Jansson and Ma (2020b). The null hypotesis is that there is continuity of the running variable for treatment and control groups at the cutoff. Each column shows the test results where the running variable is the ICSC index of each edition. Effective observations are those that are taken into account in local estimations.



(a) (b)

Figure 8: Density estimation for the running variable

Table 18: **Placebo Analysis: Effect of APRENDER on *Aristas* index**

	Aristas index
	(1)
Conventional	0.077
	(0.104)
	[-0.127,0.281]
Bias-corrected	0.085
	(0.104)
	[-0.119,0.289]
Robust	0.085
	(0.123)
	[-0.156,0.327]
Controls:	
Grade FE	Yes
Year FE	Yes
Region FE	Yes
Kernel	Triangular
Bandwidth Selection	MSE-optimal
Order Loc. Poly. (p)	1
Mean Dep. Var.	-0.339
SD Dep. Var.	0.627
Observations	9,703
Eff. Obs. at the Left ; Right	1986 ; 2004
Eff. Schools at the Left ; Right	30 ; 29

Notes: The Table reports the RD specification estimates associating the *Aristas* sociocultural index with the ICSC index. The *Aristas* survey was conducted by INEEd in 2017 and 2020, selecting a sample of third and sixth graders. The table reports three different estimates for each estimation: Conventional, Bias-Corrected, and Robust-Bias-Corrected. According to Cattaneo et al. (2020), the estimate considered is the Conventional, while the Confidence Interval and p-value of the Robust-Bias-Corrected estimate are taken into account for inference; see text for details. The ICSC index measures the vulnerability of the area where the school is located according to socio-economic indicators; see text for details. It is rescaled in such a way that a school is eligible to be APRENDER if its index is higher than zero; otherwise, it should be UC. All specifications implement a sharp RD design due to perfect compliance. Grade, year, and region fixed effects are implemented in every specification. Clusters at the school level are taken in every specification. Kernel indicates how the observations are weighted. Bandwidth Selection indicates the criteria used to choose bandwidth. Order Loc. Poly. (p) indicates the order of the local polynomial used for the estimation. The mean and standard deviation of the dependent variable are measured inside the bandwidth used for the estimation. Effective observations are those that are taken into account in local estimations. Standard errors in parenthesis. Confidence Intervals in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Table 19: **Effect of APRENDER on Grade Retention 2017-2019 with placebo cutoffs**

	(1) -1	(2) -0.5	(3) 0	(4) 0.5	(5) 1
Conventional	-0.773	0.666	-2.306***	-0.694	-0.529
	(0.647)	(0.953)	(0.773)	(1.323)	(1.077)
	[-2.041,0.494]	[-1.202,2.533]	[-3.820,-0.791]	[-3.286,1.898]	[-2.640,1.581]
Bias-corrected	-0.583	0.870	-2.619***	-0.966	-0.843
	(0.647)	(0.953)	(0.773)	(1.323)	(1.077)
	[-1.851,0.684]	[-0.997,2.737]	[-4.134,-1.105]	[-3.558,1.627]	[-2.954,1.267]
Robust	-0.583	0.870	-2.619***	-0.966	-0.843
	(0.753)	(1.154)	(0.875)	(1.513)	(1.248)
	[-2.060,0.893]	[-1.391,3.131]	[-4.334,-0.905]	[-3.932,2.001]	[-3.290,1.603]
Controls:					
Grade FE	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes	Yes
Kernel	Triangular	Triangular	Triangular	Triangular	Triangular
Bandwidth Selection	MSE-optimal	MSE-optimal	MSE-optimal	MSE-optimal	MSE-optimal
Order Loc. Poly. (p)	1	1	1	1	1
Mean Dep. Var.	2.857	3.344	3.988	4.828	5.218
SD Dep. Var.	5.012	5.509	6.079	6.498	7.051
Observations	5,094	5,094	9,491	4,397	4,397
Eff. Obs. at the Left ; Right	738 ; 774	648 ; 635	1614 ; 1494	480 ; 432	1139 ; 504
Eff. Schools at the Left ; Right	43 ; 47	38 ; 40	98 ; 85	27 ; 24	64 ; 30

Notes: The Table reports the RD specification estimates associating Grade Retention with the ICSC index. The table reports three different estimates for each estimation: Conventional, Bias-Corrected, and Robust-Bias-Corrected. According to Cattaneo et al. (2020), the estimate considered is the Conventional, while the Confidence Interval and p-value of the Robust-Bias-Corrected estimate are taken into account for inference; see text for details. In all specifications, the dependent variable is the percentage of students that were grade-retained between first and sixth grade across schools using data from ANEP. The ICSC index measures the vulnerability of the area where the school is located according to socio-economic indicators; see text for details. It is rescaled in such a way that a school is eligible to be APRENDER if its index is higher than zero; otherwise, it should be UC. Each (1)-(5) column specifies the same model for different selected cutoffs detailed in them. (1)-(2) only include observations with ICSC index lower than 0, whereas (4)-(5) only include observations with ICSC index bigger than 0. Years included in all specifications are 2017-2019. All specifications implement a sharp RD design due to perfect compliance. Grade, year, and region fixed effects are implemented in every specification. Clusters at the school level are taken in every specification. Kernel indicates how the observations are weighted. Bandwidth Selection indicates the criteria used to choose bandwidth. Order Loc. Poly. (p) indicates the order of the local polynomial used for the estimation. The mean and standard deviation of the dependent variable are measured inside the bandwidth used for the estimation. Effective observations are those that are taken into account in local estimations. Standard errors in parenthesis. Confidence Intervals in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Table 20: **Sensitivity to observations near the cutoff: Grade Retention 2017-2019**

	(1)	(2)	(3)	(4)
	0	0.0035	0.007	0.0105
Conventional	-2.306***	-2.263***	-1.343*	-1.330*
	(0.773)	(0.824)	(0.687)	(0.717)
	[-3.820,-0.791]	[-3.877,-0.648]	[-2.691,0.004]	[-2.735,0.074]
Bias-corrected	-2.619***	-2.588***	-1.541**	-1.529**
	(0.773)	(0.824)	(0.687)	(0.717)
	[-4.134,-1.105]	[-4.203,-0.974]	[-2.889,-0.194]	[-2.934,-0.125]
Robust	-2.619***	-2.588***	-1.541*	-1.529*
	(0.875)	(0.937)	(0.813)	(0.852)
	[-4.334,-0.905]	[-4.424,-0.753]	[-3.135,0.052]	[-3.199,0.140]
Controls:				
Grade FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes
Kernel	Triangular	Triangular	Triangular	Triangular
Bandwidth Selection	MSE-optimal	MSE-optimal	MSE-optimal	MSE-optimal
Order Loc. Poly. (p)	1	1	1	1
Mean Dep. Var.	3.988	3.908	3.924	3.943
SD Dep. Var.	6.079	5.956	5.998	6.020
Observations	9,491	9,455	9,419	9,383
Eff. Obs. at the Left ; Right	1614 ; 1494	1524 ; 1350	2148 ; 1710	2136 ; 1656
Eff. Schools at the Left ; Right	98 ; 85	93 ; 77	130 ; 97	129 ; 94

Notes: The Table reports the RD specification estimates associating Grade Retention with the ICSC index. The table reports three different estimates for each estimation: Conventional, Bias-Corrected, and Robust-Bias-Corrected. According to Cattaneo et al. (2020), the estimate considered is the Conventional, while the Confidence Interval and p-value of the Robust-Bias-Corrected estimate are taken into account for inference; see text for details. In all specifications, the dependent variable is the percentage of students that were grade-retained between first and sixth grade across schools using data from ANEP. The ICSC index measures the vulnerability of the area where the school is located according to socio-economic indicators; see text for details. It is rescaled in such a way that a school is eligible to be APRENDER if its index is higher than zero; otherwise, it should be UC. Each (1)-(4) column specifies the same model for different ranges of observations near the cutoff excluded. The range excluded on each side of the cutoff is detailed in them. Years included in all specifications are 2017-2019. All specifications implement a sharp RD design due to perfect compliance. Grade, year, and region fixed effects are implemented in every specification. Clusters at the school level are taken in every specification. Kernel indicates how the observations are weighted. Bandwidth Selection indicates the criteria used to choose bandwidth. Order Loc. Poly. (p) indicates the order of the local polynomial used for the estimation. The mean and standard deviation of the dependent variable are measured inside the bandwidth used for the estimation. Effective observations are those that are taken into account in local estimations. Standard errors in parenthesis. Confidence Intervals in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Table 21: **Sensitivity to different specifications: Grade Retention 2017-2019**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Conventional	-2.306***	-2.359***	-2.953***	-2.790***	-2.882***	-2.088***	-1.930**
	(0.773)	(0.749)	(0.876)	(0.863)	(0.940)	(0.765)	(0.768)
	[-3.820,-0.791]	[-3.827,-0.891]	[-4.670,-1.235]	[-4.482,-1.098]	[-4.724,-1.040]	[-3.588,-0.588]	[-3.435,-0.426]
Bias-corrected	-2.619***	-2.706***	-3.097***	-2.956***	-3.203***	-2.378***	-2.185***
	(0.773)	(0.749)	(0.876)	(0.863)	(0.940)	(0.765)	(0.768)
	[-4.134,-1.105]	[-4.175,-1.238]	[-4.815,-1.379]	[-4.648,-1.265]	[-5.045,-1.360]	[-3.878,-0.878]	[-3.690,-0.680]
Robust	-2.619***	-2.706***	-3.097***	-2.956***	-3.203***	-2.378***	-2.185**
	(0.875)	(0.855)	(0.940)	(0.928)	(1.018)	(0.870)	(0.885)
	[-4.334,-0.905]	[-4.382,-1.031]	[-4.940,-1.254]	[-4.775,-1.137]	[-5.199,-1.207]	[-4.083,-0.672]	[-3.919,-0.452]
Controls:							
Grade FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Kernel	Triangular	Triangular	Triangular	Triangular	Triangular	Epanechnikov	Uniform
Bandwidth Selection	MSE-optimal	MSE two	CER-optimal	CER two	MSE-optimal	MSE-optimal	MSE-optimal
Order Loc. Poly. (p)	1	1	1	1	2	1	1
Mean Dep. Var.	3.988	3.988	3.876	3.876	3.907	3.965	3.869
SD Dep. Var.	6.079	6.079	6.033	6.033	6.051	6.053	5.905
Observations	9,491	9,491	9,491	9,491	9,491	9,491	9,491
Eff. Obs. at the Left ; Right	1614 ; 1494	1614 ; 1800	966 ; 1122	966 ; 1458	2292 ; 1764	1542 ; 1458	1344 ; 1314
Eff. Schools at the Left ; Right	98 ; 85	98 ; 85	58 ; 64	58 ; 64	138 ; 100	94 ; 83	81 ; 75

Notes: The Table reports the RD specification estimates associating Grade Retention with the ICSC index. The table reports three different estimates for each estimation: Conventional, Bias-Corrected, and Robust-Bias-Corrected. According to Cattaneo et al. (2020), the estimate considered is the Conventional, while the Confidence Interval and p-value of the Robust-Bias-Corrected estimate are taken into account for inference; see text for details. In all specifications, the dependent variable is the percentage of students that were grade-retained between first and sixth grade across schools using data from ANEP. The ICSC index measures the vulnerability of the area where the school is located according to socio-economic indicators; see text for details. It is rescaled in such a way that a school is eligible to be APRENDER if its index is higher than zero; otherwise, it should be UC. Each (1)-(7) column specifies different model specifications detailed in them. (2)-(4) include different bandwidth selection methods, (5) includes different order of the Local Polynomial, (6)-(7) include different kernel functions. All specifications implement a sharp RD design due to perfect compliance. Grade, year, and region fixed effects are implemented in every specification. Clusters at the school level are taken in every specification. Kernel indicates how the observations are weighted. Bandwidth Selection indicates the criteria used to choose bandwidth. Order Loc. Poly. (p) indicates the order of the local polynomial used for the estimation. The mean and standard deviation of the dependent variable are measured inside the bandwidth used for the estimation. Effective observations are those that are taken into account in local estimations. Standard errors in parenthesis. Confidence Intervals in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Table 22: **Effect of APRENDER on Grade Retention in First Cycle 2017-2019 with placebo cutoffs**

	(1) -1	(2) -0.5	(3) 0	(4) 0.5	(5) 1
Conventional	-1.646	1.555	-4.621***	-0.568	0.246
	(1.161)	(1.576)	(1.341)	(1.917)	(1.526)
	[-3.923,0.630]	[-1.534,4.644]	[-7.250,-1.991]	[-4.325,3.190]	[-2.744,3.236]
Bias-corrected	-1.363	1.855	-5.173***	-0.810	-0.072
	(1.161)	(1.576)	(1.341)	(1.917)	(1.526)
	[-3.640,0.913]	[-1.233,4.944]	[-7.802,-2.544]	[-4.567,2.948]	[-3.062,2.918]
Robust	-1.363	1.855	-5.173***	-0.810	-0.072
	(1.360)	(1.939)	(1.490)	(2.220)	(1.767)
	[-4.029,1.302]	[-1.944,5.655]	[-8.094,-2.252]	[-5.160,3.540]	[-3.536,3.392]
Controls:					
Grade FE	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes	Yes
Kernel	Triangular	Triangular	Triangular	Triangular	Triangular
Bandwidth Selection	MSE-optimal	MSE-optimal	MSE-optimal	MSE-optimal	MSE-optimal
Order Loc. Poly. (p)	1	1	1	1	1
Mean Dep. Var.	4.852	5.434	6.339	7.424	8.309
SD Dep. Var.	6.183	6.683	7.066	7.505	8.095
Observations	2,546	2,546	4,745	2,199	2,199
Eff. Obs. at the Left ; Right	378 ; 405	324 ; 296	662 ; 657	249 ; 225	588 ; 252
Eff. Schools at the Left ; Right	44 ; 50	38 ; 37	80 ; 75	28 ; 25	66 ; 30

Notes: The Table reports the RD specification estimates associating Grade Retention with the ICSC index. The table reports three different estimates for each estimation: Conventional, Bias-Corrected, and Robust-Bias-Corrected. According to Cattaneo et al. (2020), the estimate considered is the Conventional, while the Confidence Interval and p-value of the Robust-Bias-Corrected estimate are taken into account for inference; see text for details. In all specifications, the dependent variable is the percentage of students that were grade-retained in a grade from First cycle across schools using data from ANEP. The ICSC index measures the vulnerability of the area where the school is located according to socio-economic indicators; see text for details. It is rescaled in such a way that a school is eligible to be APRENDER if its index is higher than zero; otherwise, it should be UC. Each (1)-(5) column specifies the same model for different selected cutoffs detailed in them. (1)-(2) only include observations with ICSC index lower than 0, whereas (4)-(5) only include observations with ICSC index bigger than 0. Years included in all specifications are 2017-2019. All specifications implement a sharp RD design due to perfect compliance. Grade, year, and region fixed effects are implemented in every specification. Clusters at the school level are taken in every specification. Kernel indicates how the observations are weighted. Bandwidth Selection indicates the criteria used to choose bandwidth. Order Loc. Poly. (p) indicates the order of the local polynomial used for the estimation. The mean and standard deviation of the dependent variable are measured inside the bandwidth used for the estimation. Effective observations are those that are taken into account in local estimations. Standard errors in parenthesis. Confidence Intervals in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Table 23: **Sensitivity to observations near the cutoff: Grade Retention in First Cycle 2017-2019**

	(1)	(2)	(3)	(4)
	0	0.0035	0.007	0.0105
Conventional	-4.621***	-4.406***	-2.801**	-2.704**
	(1.341)	(1.422)	(1.215)	(1.259)
	[-7.250,-1.991]	[-7.193,-1.619]	[-5.183,-0.420]	[-5.173,-0.236]
Bias-corrected	-5.173***	-4.980***	-3.203***	-3.091**
	(1.341)	(1.422)	(1.215)	(1.259)
	[-7.802,-2.544]	[-7.767,-2.194]	[-5.585,-0.822]	[-5.559,-0.622]
Robust	-5.173***	-4.980***	-3.203**	-3.091**
	(1.490)	(1.596)	(1.424)	(1.492)
	[-8.094,-2.252]	[-8.108,-1.852]	[-5.995,-0.411]	[-6.015,-0.166]
Controls:				
Grade FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes
Kernel	Triangular	Triangular	Triangular	Triangular
Bandwidth Selection	MSE-optimal	MSE-optimal	MSE-optimal	MSE-optimal
Order Loc. Poly. (p)	1	1	1	1
Mean Dep. Var.	6.339	6.411	6.288	6.379
SD Dep. Var.	7.066	7.043	7.110	7.179
Observations	4,745	4,727	4,709	4,691
Eff. Obs. at the Left ; Right	662 ; 657	644 ; 648	944 ; 801	953 ; 792
Eff. Schools at the Left ; Right	80 ; 75	78 ; 74	114 ; 91	115 ; 90

Notes: The Table reports the RD specification estimates associating Grade Retention with the ICSC index. The table reports three different estimates for each estimation: Conventional, Bias-Corrected, and Robust-Bias-Corrected. According to Cattaneo et al. (2020), the estimate considered is the Conventional, while the Confidence Interval and p-value of the Robust-Bias-Corrected estimate are taken into account for inference; see text for details. In all specifications, the dependent variable is the percentage of students that were grade-retained in a grade from First cycle across schools using data from ANEP. The ICSC index measures the vulnerability of the area where the school is located according to socio-economic indicators; see text for details. It is rescaled in such a way that a school is eligible to be APRENDER if its index is higher than zero; otherwise, it should be UC. Each (1)-(4) column specifies the same model for different ranges of observations near the cutoff excluded. The range excluded on each side of the cutoff is detailed in them. Years included in all specifications are 2017-2019. All specifications implement a sharp RD design due to perfect compliance. Grade, year, and region fixed effects are implemented in every specification. Clusters at the school level are taken in every specification. Kernel indicates how the observations are weighted. Bandwidth Selection indicates the criteria used to choose bandwidth. Order Loc. Poly. (p) indicates the order of the local polynomial used for the estimation. The mean and standard deviation of the dependent variable are measured inside the bandwidth used for the estimation. Effective observations are those that are taken into account in local estimations. Standard errors in parenthesis. Confidence Intervals in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Table 24: **Sensitivity to different specifications: Grade Retention in First Cycle 2017-2019**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Conventional	-4.621***	-4.714***	-5.848***	-5.386***	-5.398***	-4.180***	-3.406***
	(1.341)	(1.283)	(1.474)	(1.452)	(1.541)	(1.340)	(1.199)
	[-7.250,-1.991]	[-7.229,-2.200]	[-8.737,-2.959]	[-8.233,-2.540]	[-8.419,-2.378]	[-6.807,-1.554]	[-5.756,-1.056]
Bias-corrected	-5.173***	-5.306***	-6.117***	-5.686***	-5.942***	-4.695***	-3.844***
	(1.341)	(1.283)	(1.474)	(1.452)	(1.541)	(1.340)	(1.199)
	[-7.802,-2.544]	[-7.821,-2.792]	[-9.006,-3.227]	[-8.532,-2.839]	[-8.963,-2.922]	[-7.322,-2.068]	[-6.195,-1.494]
Robust	-5.173***	-5.306***	-6.117***	-5.686***	-5.942***	-4.695***	-3.844***
	(1.490)	(1.445)	(1.585)	(1.563)	(1.659)	(1.494)	(1.398)
	[-8.094,-2.252]	[-8.138,-2.474]	[-9.222,-3.011]	[-8.748,-2.623]	[-9.194,-2.690]	[-7.624,-1.766]	[-6.585,-1.104]
Controls:							
Grade FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Kernel	Triangular	Triangular	Triangular	Triangular	Triangular	Epanechnikov	Uniform
Bandwidth Selection	MSE-optimal	MSE two	CER-optimal	CER two	MSE-optimal	MSE-optimal	MSE-optimal
Order Loc. Poly. (p)	1	1	1	1	2	1	1
Mean Dep. Var.	6.339	6.369	6.536	6.563	6.371	6.369	6.380
SD Dep. Var.	7.066	7.076	7.297	7.318	7.250	7.076	7.135
Observations	4,745	4,745	4,745	4,745	4,745	4,745	4,745
Eff. Obs. at the Left ; Right	662 ; 657	653 ; 936	435 ; 516	435 ; 747	1145 ; 900	653 ; 642	761 ; 684
Eff. Schools at the Left ; Right	80 ; 75	79 ; 73	52 ; 59	52 ; 57	138 ; 102	79 ; 73	93 ; 78

Notes: The Table reports the RD specification estimates associating Grade Retention with the ICSC index. The table reports three different estimates for each estimation: Conventional, Bias-Corrected, and Robust-Bias-Corrected. According to Cattaneo et al. (2020), the estimate considered is the Conventional, while the Confidence Interval and p-value of the Robust-Bias-Corrected estimate are taken into account for inference; see text for details. In all specifications, the dependent variable is the percentage of students that were grade-retained in a grade from First cycle across schools using data from ANEP. The ICSC index measures the vulnerability of the area where the school is located according to socio-economic indicators; see text for details. It is rescaled in such a way that a school is eligible to be APRENDER if its index is higher than zero; otherwise, it should be UC. Each (1)-(7) column specifies different model specifications detailed in them. (2)-(4) include different bandwidth selection methods, (5) includes different order of the Local Polynomial, (6)-(7) include different kernel functions. All specifications implement a sharp RD design due to perfect compliance. Grade, year, and region fixed effects are implemented in every specification. Clusters at the school level are taken in every specification. Kernel indicates how the observations are weighted. Bandwidth Selection indicates the criteria used to choose bandwidth. Order Loc. Poly. (p) indicates the order of the local polynomial used for the estimation. The mean and standard deviation of the dependent variable are measured inside the bandwidth used for the estimation. Effective observations are those that are taken into account in local estimations. Standard errors in parenthesis. Confidence Intervals in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Table 25: **Effect of APRENDER on Insufficient Attendance in First Cycle 2017-2019 with placebo cutoffs**

	(1) -1	(2) -0.5	(3) 0	(4) 0.5	(5) 1
Conventional	2.066	-0.853	-3.708*	6.889***	1.186
	(1.498)	(2.699)	(2.195)	(2.506)	(3.064)
	[-0.870,5.002]	[-6.143,4.436]	[-8.009,0.594]	[1.978,11.801]	[-4.820,7.191]
Bias-corrected	2.544*	-1.226	-4.317**	7.423***	1.813
	(1.498)	(2.699)	(2.195)	(2.506)	(3.064)
	[-0.392,5.480]	[-6.515,4.063]	[-8.619,-0.016]	[2.511,12.335]	[-4.193,7.818]
Robust	2.544	-1.226	-4.317*	7.423***	1.813
	(1.726)	(3.204)	(2.573)	(2.805)	(3.535)
	[-0.839,5.928]	[-7.505,5.053]	[-9.360,0.725]	[1.925,12.920]	[-5.116,8.742]
Controls:					
Grade FE	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes	Yes
Kernel	Triangular	Triangular	Triangular	Triangular	Triangular
Bandwidth Selection	MSE-optimal	MSE-optimal	MSE-optimal	MSE-optimal	MSE-optimal
Order Loc. Poly. (p)	1	1	1	1	1
Mean Dep. Var.	8.158	10.987	14.679	17.838	20.325
SD Dep. Var.	8.576	10.264	11.484	11.054	12.381
Observations	2,546	2,546	4,745	2,199	2,199
Eff. Obs. at the Left ; Right	498 ; 543	435 ; 380	989 ; 819	285 ; 261	660 ; 315
Eff. Schools at the Left ; Right	58 ; 66	51 ; 48	119 ; 93	32 ; 29	74 ; 37

Notes: The Table reports the RD specification estimates associating Insufficient Attendance with the ICSC index. The table reports three different estimates for each estimation: Conventional, Bias-Corrected, and Robust-Bias-Corrected. According to Cattaneo et al. (2020), the estimate considered is the Conventional, while the Confidence Interval and p-value of the Robust-Bias-Corrected estimate are taken into account for inference; see text for details. In all specifications, the dependent variable is the percentage of students who attended more than 70 days but less than 140 days in the academic year in a grade from across schools using data from ANEP. The ICSC index measures the vulnerability of the area where the school is located according to socio-economic indicators; see text for details. It is rescaled in such a way that a school is eligible to be APRENDER if its index is higher than zero; otherwise, it should be UC. Each (1)-(5) column specifies the same model for different selected cutoffs detailed in them. (1)-(2) only include observations with ICSC index lower than 0, whereas (4)-(5) only include observations with ICSC index bigger than 0. Years included in all specifications are 2017-2019. All specifications implement a sharp RD design due to perfect compliance. Grade, year, and region fixed effects are implemented in every specification. Clusters at the school level are taken in every specification. Kernel indicates how the observations are weighted. Bandwidth Selection indicates the criteria used to choose bandwidth. Order Loc. Poly. (p) indicates the order of the local polynomial used for the estimation. The mean and standard deviation of the dependent variable are measured inside the bandwidth used for the estimation. Effective observations are those that are taken into account in local estimations. Standard errors in parenthesis. Confidence Intervals in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Table 26: **Sensitivity to observations near the cutoff: Insufficient Attendance in First Cycle 2017-2019**

	(1) 0	(2) 0.0035	(3) 0.007	(4) 0.0105
Conventional	-3.708*	-3.863	-1.666	-1.071
	(2.195)	(2.356)	(1.867)	(1.961)
	[-8.009,0.594]	[-8.482,0.755]	[-5.324,1.993]	[-4.915,2.772]
Bias-corrected	-4.317**	-4.504*	-1.894	-1.070
	(2.195)	(2.356)	(1.867)	(1.961)
	[-8.619,-0.016]	[-9.122,0.114]	[-5.552,1.765]	[-4.914,2.773]
Robust	-4.317*	-4.504	-1.894	-1.070
	(2.573)	(2.782)	(2.250)	(2.392)
	[-9.360,0.725]	[-9.957,0.949]	[-6.303,2.516]	[-5.759,3.619]
Controls:				
Grade FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes
Kernel	Triangular	Triangular	Triangular	Triangular
Bandwidth Selection	MSE-optimal	MSE-optimal	MSE-optimal	MSE-optimal
Order Loc. Poly. (p)	1	1	1	1
Mean Dep. Var.	14.679	14.628	14.263	14.365
SD Dep. Var.	11.484	11.493	11.397	11.463
Observations	4,745	4,727	4,709	4,691
Eff. Obs. at the Left ; Right	989 ; 819	908 ; 783	1232 ; 999	1208 ; 963
Eff. Schools at the Left ; Right	119 ; 93	110 ; 89	149 ; 113	146 ; 109

Notes: The Table reports the RD specification estimates associating Insufficient Attendance with the ICSC index. The table reports three different estimates for each estimation: Conventional, Bias-Corrected, and Robust-Bias-Corrected. According to Cattaneo et al. (2020), the estimate considered is the Conventional, while the Confidence Interval and p-value of the Robust-Bias-Corrected estimate are taken into account for inference; see text for details. In all specifications, the dependent variable is the percentage of students who attended more than 70 days but less than 140 days in the academic year in a grade from across schools using data from ANEP. The ICSC index measures the vulnerability of the area where the school is located according to socio-economic indicators; see text for details. It is rescaled in such a way that a school is eligible to be APRENDER if its index is higher than zero; otherwise, it should be UC. Each (1)-(4) column specifies the same model for different ranges of observations near the cutoff excluded. The range excluded on each side of the cutoff is detailed in them. Years included in all specifications are 2017-2019. All specifications implement a sharp RD design due to perfect compliance. Grade, year, and region fixed effects are implemented in every specification. Clusters at the school level are taken in every specification. Kernel indicates how the observations are weighted. Bandwidth Selection indicates the criteria used to choose bandwidth. Order Loc. Poly. (p) indicates the order of the local polynomial used for the estimation. The mean and standard deviation of the dependent variable are measured inside the bandwidth used for the estimation. Effective observations are those that are taken into account in local estimations. Standard errors in parenthesis. Confidence Intervals in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Table 27: **Sensitivity to different specifications: Insufficient Attendance in First Cycle 2017-2019**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Conventional	-3.708*	-4.026*	-5.706**	-5.533**	-5.936**	-2.995	-2.495
	(2.195)	(2.203)	(2.590)	(2.625)	(2.857)	(2.099)	(2.004)
	[-8.009,0.594]	[-8.343,0.291]	[-10.783,-0.629]	[-10.678,-0.388]	[-11.536,-0.336]	[-7.109,1.119]	[-6.422,1.432]
Bias-corrected	-4.317**	-4.462**	-6.019**	-5.717**	-6.780**	-3.451	-2.865
	(2.195)	(2.203)	(2.590)	(2.625)	(2.857)	(2.099)	(2.004)
	[-8.619,-0.016]	[-8.780,-0.145]	[-11.096,-0.942]	[-10.862,-0.572]	[-12.380,-1.180]	[-7.565,0.664]	[-6.792,1.062]
Robust	-4.317*	-4.462*	-6.019**	-5.717**	-6.780**	-3.451	-2.865
	(2.573)	(2.570)	(2.852)	(2.856)	(3.143)	(2.479)	(2.356)
	[-9.360,0.725]	[-9.500,0.575]	[-11.610,-0.428]	[-11.315,-0.119]	[-12.941,-0.619]	[-8.309,1.408]	[-7.482,1.753]
Controls:							
Grade FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Kernel	Triangular	Triangular	Triangular	Triangular	Triangular	Epanechnikov	Uniform
Bandwidth Selection	MSE-optimal	MSE two	CER-optimal	CER two	MSE-optimal	MSE-optimal	MSE-optimal
Order Loc. Poly. (p)	1	1	1	1	2	1	1
Mean Dep. Var.	14.679	14.826	15.178	15.429	14.383	14.643	14.553
SD Dep. Var.	11.484	11.615	11.633	11.967	11.450	11.485	11.438
Observations	4,745	4,745	4,745	4,745	4,745	4,745	4,745
Eff. Obs. at the Left ; Right	989 ; 819	824 ; 954	632 ; 633	521 ; 756	1250 ; 990	995 ; 819	926 ; 792
Eff. Schools at the Left ; Right	119 ; 93	100 ; 86	76 ; 72	63 ; 65	151 ; 112	120 ; 93	112 ; 90

Notes: The Table reports the RD specification estimates associating Insufficient Attendance with the ICSC index. The table reports three different estimates for each estimation: Conventional, Bias-Corrected, and Robust-Bias-Corrected. According to Cattaneo et al. (2020), the estimate considered is the Conventional, while the Confidence Interval and p-value of the Robust-Bias-Corrected estimate are taken into account for inference; see text for details. In all specifications, the dependent variable is the percentage of students who attended more than 70 days but less than 140 days in the academic year in a grade from across schools using data from ANEP. The ICSC index measures the vulnerability of the area where the school is located according to socio-economic indicators; see text for details. It is rescaled in such a way that a school is eligible to be APRENDER if its index is higher than zero; otherwise, it should be UC. Each (1)-(7) column specifies different model specifications detailed in them. (2)-(4) include different bandwidth selection methods, (5) includes different order of the Local Polynomial, (6)-(7) include different kernel functions. All specifications implement a sharp RD design due to perfect compliance. Grade, year, and region fixed effects are implemented in every specification. Clusters at the school level are taken in every specification. Kernel indicates how the observations are weighted. Bandwidth Selection indicates the criteria used to choose bandwidth. Order Loc. Poly. (p) indicates the order of the local polynomial used for the estimation. The mean and standard deviation of the dependent variable are measured inside the bandwidth used for the estimation. Effective observations are those that are taken into account in local estimations. Standard errors in parenthesis. Confidence Intervals in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Table 28: **Sensitivity to observations near the cutoff: Language Score**

	(1) 0	(2) 0.01	(3) 0.02	(4) 0.03
Conventional	0.307***	0.354***	0.332***	0.327***
	(0.096)	(0.091)	(0.118)	(0.122)
	[0.119,0.495]	[0.176,0.532]	[0.099,0.564]	[0.088,0.566]
Bias-corrected	0.352***	0.395***	0.372***	0.380***
	(0.096)	(0.091)	(0.118)	(0.122)
	[0.164,0.540]	[0.217,0.573]	[0.140,0.604]	[0.141,0.619]
Robust	0.352***	0.395***	0.372**	0.380**
	(0.110)	(0.110)	(0.148)	(0.153)
	[0.136,0.568]	[0.180,0.610]	[0.083,0.662]	[0.080,0.680]
Controls:				
Grade FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes
Kernel	Triangular	Triangular	Triangular	Triangular
Bandwidth Selection	MSE-optimal	MSE-optimal	MSE-optimal	MSE-optimal
Order Loc. Poly. (p)	1	1	1	1
Mean Dep. Var.	5.889	5.871	5.863	5.865
SD Dep. Var.	0.964	0.959	0.956	0.958
Observations	11,191	11,158	11,049	11,002
Eff. Obs. at the Left ; Right	1063 ; 1812	706 ; 1627	652 ; 1518	605 ; 1518
Eff. Schools at the Left ; Right	13 ; 24	10 ; 21	9 ; 19	8 ; 19

Notes: The Table reports the RD specification estimates associating Language tests results with the ICSC index. The table reports three different estimates for each estimation: Conventional, Bias-Corrected, and Robust-Bias-Corrected. According to Cattaneo et al. (2020), the estimate considered is the Conventional, while the Confidence Interval and p-value of the Robust-Bias-Corrected estimate are taken into account for inference; see text for details. In all specifications, the dependent variable are the results from *Aristas* language standardized tests conducted by INEEd in 2017 and 2020 to third and sixth graders. The ICSC index measures the vulnerability of the area where the school is located according to socio-economic indicators; see text for details. It is rescaled in such a way that a school is eligible to be APRENDER if its index is higher than zero; otherwise, it should be UC. Each (1)-(4) column specifies the same model for different ranges of observations near the cutoff excluded. The range excluded on each side of the cutoff is detailed in them. All specifications implement a sharp RD design due to perfect compliance. Grade, year, and region fixed effects are implemented in every specification. Clusters at the school level are taken in every specification. Kernel indicates how the observations are weighted. Bandwidth Selection indicates the criteria used to choose bandwidth. Order Loc. Poly. (p) indicates the order of the local polynomial used for the estimation. The mean and standard deviation of the dependent variable are measured inside the bandwidth used for the estimation. Effective observations are those that are taken into account in local estimations. Standard errors in parenthesis. Confidence Intervals in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Table 29: **Sensitivity to different specifications: Language Score**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Conventional	0.307***	0.301***	0.273***	0.270***	0.374***	0.304***	0.312***
	(0.096)	(0.096)	(0.094)	(0.095)	(0.115)	(0.100)	(0.109)
	[0.119,0.495]	[0.112,0.490]	[0.088,0.457]	[0.083,0.456]	[0.148,0.599]	[0.107,0.500]	[0.099,0.526]
Bias-corrected	0.352***	0.305***	0.297***	0.268***	0.403***	0.352***	0.358***
	(0.096)	(0.096)	(0.094)	(0.095)	(0.115)	(0.100)	(0.109)
	[0.164,0.540]	[0.116,0.494]	[0.113,0.482]	[0.082,0.455]	[0.178,0.629]	[0.156,0.549]	[0.145,0.572]
Robust	0.352***	0.305***	0.297***	0.268**	0.403***	0.352***	0.358***
	(0.110)	(0.114)	(0.106)	(0.107)	(0.130)	(0.114)	(0.120)
	[0.136,0.568]	[0.082,0.528]	[0.089,0.506]	[0.059,0.478]	[0.148,0.659]	[0.129,0.575]	[0.123,0.594]
Controls:							
Grade FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Kernel	Triangular	Triangular	Triangular	Triangular	Triangular	Epanechnikov	Uniform
Bandwidth Selection	MSE-optimal	MSE two	CER-optimal	CER two	MSE-optimal	MSE-optimal	MSE-optimal
Order Loc. Poly. (p)	1	1	1	1	2	1	1
Mean Dep. Var.	5.889	5.889	5.867	5.848	5.923	5.899	5.869
SD Dep. Var.	0.964	0.964	0.960	0.957	0.961	0.967	0.959
Observations	11,191	11,191	11,191	11,191	11,191	11,191	11,191
Eff. Obs. at the Left ; Right	1063 ; 1812	1063 ; 1812	652 ; 1660	583 ; 1660	2594 ; 2617	1063 ; 1727	706 ; 1660
Eff. Schools at the Left ; Right	13 ; 24	13 ; 24	9 ; 22	8 ; 18	35 ; 34	13 ; 23	10 ; 22

Notes: The Table reports the RD specification estimates associating Language tests results with the ICSC index. The table reports three different estimates for each estimation: Conventional, Bias-Corrected, and Robust-Bias-Corrected. According to Cattaneo et al. (2020), the estimate considered is the Conventional, while the Confidence Interval and p-value of the Robust-Bias-Corrected estimate are taken into account for inference; see text for details. In all specifications, the dependent variable are the results from *Aristas* language standardized tests conducted by INEEd in 2017 and 2020 to third and sixth graders. The ICSC index measures the vulnerability of the area where the school is located according to socio-economic indicators; see text for details. It is rescaled in such a way that a school is eligible to be APRENDER if its index is higher than zero; otherwise, it should be UC. Each (1)-(7) column specifies different model specifications detailed in them. (2)-(4) include different bandwidth selection methods, (5) includes different order of the Local Polynomial, (6)-(7) include different kernel functions. All specifications implement a sharp RD design due to perfect compliance. Grade, year, and region fixed effects are implemented in every specification. Clusters at the school level are taken in every specification. Kernel indicates how the observations are weighted. Bandwidth Selection indicates the criteria used to choose bandwidth. Order Loc. Poly. (p) indicates the order of the local polynomial used for the estimation. The mean and standard deviation of the dependent variable are measured inside the bandwidth used for the estimation. Effective observations are those that are taken into account in local estimations. Standard errors in parenthesis. Confidence Intervals in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Table 30: **Sensitivity to observations near the cutoff: Math Score**

	(1)	(2)	(3)	(4)
	0	0.01	0.02	0.03
Conventional	0.272*	0.293*	0.330*	0.389**
	(0.143)	(0.150)	(0.177)	(0.189)
	[-0.009,0.552]	[-0.001,0.586]	[-0.017,0.676]	[0.019,0.759]
Bias-corrected	0.315**	0.342**	0.394**	0.465**
	(0.143)	(0.150)	(0.177)	(0.189)
	[0.035,0.596]	[0.048,0.635]	[0.047,0.741]	[0.095,0.835]
Robust	0.315*	0.342*	0.394*	0.465**
	(0.170)	(0.179)	(0.211)	(0.224)
	[-0.017,0.648]	[-0.009,0.693]	[-0.020,0.809]	[0.026,0.905]
Controls:				
Grade FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes
Kernel	Triangular	Triangular	Triangular	Triangular
Bandwidth Selection	MSE-optimal	MSE-optimal	MSE-optimal	MSE-optimal
Order Loc. Poly. (p)	1	1	1	1
Mean Dep. Var.	5.895	5.893	5.888	5.884
SD Dep. Var.	0.922	0.924	0.925	0.919
Observations	11,178	11,148	11,033	10,989
Eff. Obs. at the Left ; Right	1433 ; 2031	1403 ; 2001	1066 ; 1664	916 ; 1596
Eff. Schools at the Left ; Right	20 ; 27	19 ; 26	13 ; 21	11 ; 20

Notes: The Table reports the RD specification estimates associating Math tests results with the ICSC index. The table reports three different estimates for each estimation: Conventional, Bias-Corrected, and Robust-Bias-Corrected. According to Cattaneo et al. (2020), the estimate considered is the Conventional, while the Confidence Interval and p-value of the Robust-Bias-Corrected estimate are taken into account for inference; see text for details. In all specifications, the dependent variable are the results from *Aristas* language standardized tests conducted by INEEd in 2017 and 2020 to third and sixth graders. The ICSC index measures the vulnerability of the area where the school is located according to socio-economic indicators; see text for details. It is rescaled in such a way that a school is eligible to be APRENDER if its index is higher than zero; otherwise, it should be UC. Each (1)-(4) column specifies the same model for different ranges of observations near the cutoff excluded. The range excluded on each side of the cutoff is detailed in them. All specifications implement a sharp RD design due to perfect compliance. Grade, year, and region fixed effects are implemented in every specification. Clusters at the school level are taken in every specification. Kernel indicates how the observations are weighted. Bandwidth Selection indicates the criteria used to choose bandwidth. Order Loc. Poly. (p) indicates the order of the local polynomial used for the estimation. The mean and standard deviation of the dependent variable are measured inside the bandwidth used for the estimation. Effective observations are those that are taken into account in local estimations. Standard errors in parenthesis. Confidence Intervals in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Table 31: **Sensitivity to different specifications: Math Score**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Conventional	0.272*	0.250*	0.225	0.262*	0.290	0.282**	0.276**
	(0.143)	(0.140)	(0.158)	(0.149)	(0.179)	(0.144)	(0.141)
	[-0.009,0.552]	[-0.026,0.525]	[-0.084,0.535]	[-0.030,0.555]	[-0.060,0.640]	[0.000,0.564]	[0.000,0.551]
Bias-corrected	0.315**	0.285**	0.254	0.285*	0.293	0.334**	0.340**
	(0.143)	(0.140)	(0.158)	(0.149)	(0.179)	(0.144)	(0.141)
	[0.035,0.596]	[0.010,0.560]	[-0.056,0.563]	[-0.008,0.577]	[-0.057,0.643]	[0.052,0.616]	[0.065,0.616]
Robust	0.315*	0.285*	0.254	0.285*	0.293	0.334**	0.340**
	(0.170)	(0.169)	(0.182)	(0.170)	(0.207)	(0.170)	(0.162)
	[-0.017,0.648]	[-0.047,0.617]	[-0.102,0.609]	[-0.049,0.618]	[-0.111,0.698]	[0.001,0.667]	[0.024,0.657]
Controls:							
Grade FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Kernel	Triangular	Triangular	Triangular	Triangular	Triangular	Epanechnikov	Uniform
Bandwidth Selection	MSE-optimal	MSE two	CER-optimal	CER two	MSE-optimal	MSE-optimal	MSE-optimal
Order Loc. Poly. (p)	1	1	1	1	2	1	1
Mean Dep. Var.	5.895	5.909	5.887	5.893	5.906	5.893	5.887
SD Dep. Var.	0.922	0.929	0.917	0.923	0.927	0.923	0.922
Observations	11,178	11,178	11,178	11,178	11,178	11,178	11,178
Eff. Obs. at the Left ; Right	1433 ; 2031	2337 ; 1865	960 ; 1741	1403 ; 1676	2585 ; 2854	1403 ; 2031	1263 ; 1948
Eff. Schools at the Left ; Right	20 ; 27	30 ; 29	12 ; 23	19 ; 27	35 ; 36	19 ; 27	17 ; 26

Notes: The Table reports the RD specification estimates associating Math tests results with the ICSC index. The table reports three different estimates for each estimation: Conventional, Bias-Corrected, and Robust-Bias-Corrected. According to Cattaneo et al. (2020), the estimate considered is the Conventional, while the Confidence Interval and p-value of the Robust-Bias-Corrected estimate are taken into account for inference; see text for details. In all specifications, the dependent variable are the results from *Aristas* language standardized tests conducted by INEEd in 2017 and 2020 to third and sixth graders. The ICSC index measures the vulnerability of the area where the school is located according to socio-economic indicators; see text for details. It is rescaled in such a way that a school is eligible to be APRENDER if its index is higher than zero; otherwise, it should be UC. Each (1)-(7) column specifies different model specifications detailed in them. (2)-(4) include different bandwidth selection methods, (5) includes different order of the Local Polynomial, (6)-(7) include different kernel functions. All specifications implement a sharp RD design due to perfect compliance. Grade, year, and region fixed effects are implemented in every specification. Clusters at the school level are taken in every specification. Kernel indicates how the observations are weighted. Bandwidth Selection indicates the criteria used to choose bandwidth. Order Loc. Poly. (p) indicates the order of the local polynomial used for the estimation. The mean and standard deviation of the dependent variable are measured inside the bandwidth used for the estimation. Effective observations are those that are taken into account in local estimations. Standard errors in parenthesis. Confidence Intervals in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Table 32: **Sensitivity to observations near the cutoff: Language Score in third grade**

	(1) 0	(2) 0.01	(3) 0.02	(4) 0.03
Conventional	0.219**	0.260**	0.303***	0.334***
	(0.100)	(0.104)	(0.114)	(0.118)
	[0.022,0.416]	[0.056,0.464]	[0.079,0.527]	[0.104,0.565]
Bias-corrected	0.248**	0.302***	0.354***	0.375***
	(0.100)	(0.104)	(0.114)	(0.118)
	[0.051,0.445]	[0.098,0.506]	[0.130,0.578]	[0.144,0.606]
Robust	0.248**	0.302**	0.354***	0.375***
	(0.119)	(0.120)	(0.129)	(0.133)
	[0.015,0.482]	[0.066,0.538]	[0.100,0.607]	[0.115,0.635]
Controls:				
Year FE	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes
Kernel	Triangular	Triangular	Triangular	Triangular
Bandwidth Selection	MSE-optimal	MSE-optimal	MSE-optimal	MSE-optimal
Order Loc. Poly. (p)	1	1	1	1
Mean Dep. Var.	5.899	5.901	5.900	5.897
SD Dep. Var.	0.939	0.941	0.940	0.936
Observations	5,452	5,439	5,392	5,371
Eff. Obs. at the Left ; Right	690 ; 1000	690 ; 987	677 ; 940	702 ; 1013
Eff. Schools at the Left ; Right	20 ; 27	20 ; 26	19 ; 24	20 ; 25

Notes: The Table reports the RD specification estimates associating Language tests results with the ICSC index. The table reports three different estimates for each estimation: Conventional, Bias-Corrected, and Robust-Bias-Corrected. According to Cattaneo et al. (2020), the estimate considered is the Conventional, while the Confidence Interval and p-value of the Robust-Bias-Corrected estimate are taken into account for inference; see text for details. In all specifications, the dependent variable are the results from *Aristas* language standardized tests conducted by INEEd in 2017 and 2020 to third and sixth graders. The ICSC index measures the vulnerability of the area where the school is located according to socio-economic indicators; see text for details. It is rescaled in such a way that a school is eligible to be APRENDER if its index is higher than zero; otherwise, it should be UC. Each (1)-(4) column specifies the same model for different ranges of observations near the cutoff excluded. The range excluded on each side of the cutoff is detailed in them. All specifications implement a sharp RD design due to perfect compliance. Year and region fixed effects are implemented in every specification. Clusters at the school level are taken in every specification. Kernel indicates how the observations are weighted. Bandwidth Selection indicates the criteria used to choose bandwidth. Order Loc. Poly. (p) indicates the order of the local polynomial used for the estimation. The mean and standard deviation of the dependent variable are measured inside the bandwidth used for the estimation. Effective observations are those that are taken into account in local estimations. Standard errors in parenthesis. Confidence Intervals in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Table 33: **Sensitivity to different specifications: Language Score in third grade**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Conventional	0.219**	0.235**	0.102	0.038	0.183	0.211**	0.189
	(0.100)	(0.099)	(0.100)	(0.102)	(0.131)	(0.105)	(0.116)
	[0.022,0.416]	[0.040,0.429]	[-0.094,0.298]	[-0.161,0.237]	[-0.074,0.440]	[0.006,0.417]	[-0.039,0.417]
Bias-corrected	0.248**	0.260***	0.122	0.053	0.148	0.243**	0.238**
	(0.100)	(0.099)	(0.100)	(0.102)	(0.131)	(0.105)	(0.116)
	[0.051,0.445]	[0.066,0.455]	[-0.074,0.318]	[-0.146,0.252]	[-0.110,0.405]	[0.037,0.448]	[0.010,0.466]
Robust	0.248**	0.260**	0.122	0.053	0.148	0.243*	0.238*
	(0.119)	(0.122)	(0.115)	(0.130)	(0.152)	(0.124)	(0.135)
	[0.015,0.482]	[0.021,0.500]	[-0.103,0.348]	[-0.202,0.307]	[-0.151,0.446]	[-0.001,0.487]	[-0.026,0.502]
Controls:							
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Kernel	Triangular	Triangular	Triangular	Triangular	Triangular	Epanechnikov	Uniform
Bandwidth Selection	MSE-optimal	MSE two	CER-optimal	CER two	MSE-optimal	MSE-optimal	MSE-optimal
Order Loc. Poly. (p)	1	1	1	1	2	1	1
Mean Dep. Var.	5.899	5.906	5.899	5.882	5.914	5.878	5.897
SD Dep. Var.	0.939	0.936	0.928	0.925	0.941	0.946	0.923
Observations	5,452	5,452	5,452	5,452	5,452	5,452	5,452
Eff. Obs. at the Left ; Right	690 ; 1000	508 ; 1073	369 ; 821	254 ; 919	1219 ; 1231	605 ; 960	328 ; 821
Eff. Schools at the Left ; Right	20 ; 27	13 ; 24	11 ; 22	8 ; 22	33 ; 32	17 ; 26	10 ; 22

Notes: The Table reports the RD specification estimates associating Language tests results with the ICSC index. The table reports three different estimates for each estimation: Conventional, Bias-Corrected, and Robust-Bias-Corrected. According to Cattaneo et al. (2020), the estimate considered is the Conventional, while the Confidence Interval and p-value of the Robust-Bias-Corrected estimate are taken into account for inference; see text for details. In all specifications, the dependent variable are the results from *Aristas* language standardized tests conducted by INEEd in 2017 and 2020 to third graders. The ICSC index measures the vulnerability of the area where the school is located according to socio-economic indicators; see text for details. It is rescaled in such a way that a school is eligible to be APRENDER if its index is higher than zero; otherwise, it should be UC. Each (1)-(7) column specifies different model specifications detailed in them. (2)-(4) include different bandwidth selection methods, (5) includes different order of the Local Polynomial, (6)-(7) include different kernel functions. All specifications implement a sharp RD design due to perfect compliance. Year and region fixed effects are implemented in every specification. Clusters at the school level are taken in every specification. Kernel indicates how the observations are weighted. Bandwidth Selection indicates the criteria used to choose bandwidth. Order Loc. Poly. (p) indicates the order of the local polynomial used for the estimation. The mean and standard deviation of the dependent variable are measured inside the bandwidth used for the estimation. Effective observations are those that are taken into account in local estimations. Standard errors in parenthesis. Confidence Intervals in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Table 34: **Sensitivity to observations near the cutoff: Language Score in sixth grade**

	(1) 0	(2) 0.01	(3) 0.02	(4) 0.03
Conventional	0.481***	0.614***	0.541***	0.539***
	(0.127)	(0.112)	(0.168)	(0.180)
	[0.233,0.729]	[0.394,0.833]	[0.211,0.872]	[0.187,0.891]
Bias-corrected	0.547***	0.685***	0.626***	0.630***
	(0.127)	(0.112)	(0.168)	(0.180)
	[0.298,0.795]	[0.466,0.904]	[0.296,0.957]	[0.278,0.983]
Robust	0.547***	0.685***	0.626***	0.630***
	(0.146)	(0.124)	(0.191)	(0.206)
	[0.261,0.832]	[0.443,0.927]	[0.253,1.000]	[0.227,1.033]
Controls:				
Year FE	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes
Kernel	Triangular	Triangular	Triangular	Triangular
Bandwidth Selection	MSE-optimal	MSE-optimal	MSE-optimal	MSE-optimal
Order Loc. Poly. (p)	1	1	1	1
Mean Dep. Var.	5.847	5.872	5.851	5.819
SD Dep. Var.	0.993	0.986	0.977	0.987
Observations	5,739	5,719	5,657	5,631
Eff. Obs. at the Left ; Right	356 ; 839	329 ; 585	329 ; 523	303 ; 652
Eff. Schools at the Left ; Right	9 ; 21	8 ; 15	8 ; 13	7 ; 15

Notes: The Table reports the RD specification estimates associating Language tests results with the ICSC index. The table reports three different estimates for each estimation: Conventional, Bias-Corrected, and Robust-Bias-Corrected. According to Cattaneo et al. (2020), the estimate considered is the Conventional, while the Confidence Interval and p-value of the Robust-Bias-Corrected estimate are taken into account for inference; see text for details. In all specifications, the dependent variable are the results from *Aristas* language standardized tests conducted by INEEd in 2017 and 2020 to sixth graders. The ICSC index measures the vulnerability of the area where the school is located according to socio-economic indicators; see text for details. It is rescaled in such a way that a school is eligible to be APRENDER if its index is higher than zero; otherwise, it should be UC. Each (1)-(4) column specifies the same model for different ranges of observations near the cutoff excluded. The range excluded on each side of the cutoff is detailed in them. All specifications implement a sharp RD design due to perfect compliance. Year and region fixed effects are implemented in every specification. Clusters at the school level are taken in every specification. Kernel indicates how the observations are weighted. Bandwidth Selection indicates the criteria used to choose bandwidth. Order Loc. Poly. (p) indicates the order of the local polynomial used for the estimation. The mean and standard deviation of the dependent variable are measured inside the bandwidth used for the estimation. Effective observations are those that are taken into account in local estimations. Standard errors in parenthesis. Confidence Intervals in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Table 35: **Sensitivity to different specifications: Language Score in sixth grade**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Conventional	0.481***	0.459***	0.504***	0.482***	0.549***	0.491***	0.218**
	(0.127)	(0.126)	(0.142)	(0.137)	(0.148)	(0.129)	(0.111)
	[0.233,0.729]	[0.212,0.705]	[0.224,0.783]	[0.214,0.751]	[0.259,0.838]	[0.238,0.745]	[0.001,0.435]
Bias-corrected	0.547***	0.539***	0.538***	0.526***	0.581***	0.557***	0.253**
	(0.127)	(0.126)	(0.142)	(0.137)	(0.148)	(0.129)	(0.111)
	[0.298,0.795]	[0.292,0.785]	[0.259,0.818]	[0.257,0.794]	[0.292,0.871]	[0.303,0.810]	[0.036,0.470]
Robust	0.547***	0.539***	0.538***	0.526***	0.581***	0.557***	0.253**
	(0.146)	(0.149)	(0.152)	(0.149)	(0.167)	(0.146)	(0.129)
	[0.261,0.832]	[0.247,0.830]	[0.240,0.836]	[0.234,0.817]	[0.254,0.909]	[0.270,0.843]	[0.001,0.505]
Controls:							
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Kernel	Triangular	Triangular	Triangular	Triangular	Triangular	Epanechnikov	Uniform
Bandwidth Selection	MSE-optimal	MSE two	CER-optimal	CER two	MSE-optimal	MSE-optimal	MSE-optimal
Order Loc. Poly. (p)	1	1	1	1	2	1	1
Mean Dep. Var.	5.847	5.873	5.870	5.870	5.913	5.847	5.920
SD Dep. Var.	0.993	0.990	0.988	0.988	0.978	0.993	0.977
Observations	5,739	5,739	5,739	5,739	5,739	5,739	5,739
Eff. Obs. at the Left ; Right	356 ; 839	503 ; 839	329 ; 605	329 ; 605	1198 ; 1206	356 ; 839	1187 ; 1177
Eff. Schools at the Left ; Right	9 ; 21	12 ; 22	8 ; 16	8 ; 16	31 ; 29	9 ; 21	30 ; 28

Notes: The Table reports the RD specification estimates associating Language Score with the ICSC index. The table reports three different estimates for each estimation: Conventional, Bias-Corrected, and Robust-Bias-Corrected. According to Cattaneo et al. (2020), the estimate considered is the Conventional, while the Confidence Interval and p-value of the Robust-Bias-Corrected estimate are taken into account for inference; see text for details. In all specifications, the dependent variable is are the results from *Aristas* language standardized tests conducted by INEEd in 2017 and 2020 to sixth graders. The ICSC index measures the vulnerability of the area where the school is located according to socio-economic indicators; see text for details. It is rescaled in such a way that a school is eligible to be APRENDER if its index is higher than zero; otherwise, it should be UC. Each (1)-(7) column specifies different model specifications detailed in them. (2)-(4) include different bandwidth selection methods, (5) includes different order of the Local Polynomial, (6)-(7) include different kernel functions. All specifications implement a sharp RD design due to perfect compliance. Year and region fixed effects are implemented in every specification. Clusters at the school level are taken in every specification. Kernel indicates how the observations are weighted. Bandwidth Selection indicates the criteria used to choose bandwidth. Order Loc. Poly. (p) indicates the order of the local polynomial used for the estimation. The mean and standard deviation of the dependent variable are measured inside the bandwidth used for the estimation. Effective observations are those that are taken into account in local estimations. Standard errors in parenthesis. Confidence Intervals in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Table 36: **Sensitivity to observations near the cutoff: Math Score in sixth grade**

	(1) 0	(2) 0.01	(3) 0.02	(4) 0.03
Conventional	0.383***	0.431***	0.419**	0.440**
	(0.137)	(0.144)	(0.202)	(0.212)
	[0.115,0.651]	[0.149,0.713]	[0.023,0.815]	[0.025,0.856]
Bias-corrected	0.412***	0.478***	0.484**	0.501**
	(0.137)	(0.144)	(0.202)	(0.212)
	[0.144,0.680]	[0.196,0.760]	[0.088,0.880]	[0.086,0.917]
Robust	0.412***	0.478***	0.484*	0.501*
	(0.159)	(0.170)	(0.252)	(0.264)
	[0.100,0.724]	[0.146,0.810]	[-0.011,0.979]	[-0.017,1.020]
Controls:				
Year FE	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes
Kernel	Triangular	Triangular	Triangular	Triangular
Bandwidth Selection	MSE-optimal	MSE-optimal	MSE-optimal	MSE-optimal
Order Loc. Poly. (p)	1	1	1	1
Mean Dep. Var.	5.875	5.875	5.861	5.871
SD Dep. Var.	0.988	0.989	0.983	0.990
Observations	5,682	5,664	5,605	5,579
Eff. Obs. at the Left ; Right	655 ; 985	553 ; 895	504 ; 805	527 ; 805
Eff. Schools at the Left ; Right	17 ; 25	13 ; 22	12 ; 19	12 ; 19

Notes: The Table reports the RD specification estimates associating Language tests results with the ICSC index. The table reports three different estimates for each estimation: Conventional, Bias-Corrected, and Robust-Bias-Corrected. According to Cattaneo et al. (2020), the estimate considered is the Conventional, while the Confidence Interval and p-value of the Robust-Bias-Corrected estimate are taken into account for inference; see text for details. In all specifications, the dependent variable are the results from *Aristas* language standardized tests conducted by INEEd in 2017 and 2020 to sixth graders. The ICSC index measures the vulnerability of the area where the school is located according to socio-economic indicators; see text for details. It is rescaled in such a way that a school is eligible to be APRENDER if its index is higher than zero; otherwise, it should be UC. Each (1)-(4) column specifies the same model for different ranges of observations near the cutoff excluded. The range excluded on each side of the cutoff is detailed in them. All specifications implement a sharp RD design due to perfect compliance. Year and region fixed effects are implemented in every specification. Clusters at the school level are taken in every specification. Kernel indicates how the observations are weighted. Bandwidth Selection indicates the criteria used to choose bandwidth. Order Loc. Poly. (p) indicates the order of the local polynomial used for the estimation. The mean and standard deviation of the dependent variable are measured inside the bandwidth used for the estimation. Effective observations are those that are taken into account in local estimations. Standard errors in parenthesis. Confidence Intervals in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Table 37: **Sensitivity to different specifications: Math Score in sixth grade**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Conventional	0.383***	0.379***	0.349***	0.407***	0.385**	0.383***	0.210
	(0.137)	(0.134)	(0.134)	(0.134)	(0.152)	(0.145)	(0.131)
	[0.115,0.651]	[0.117,0.641]	[0.086,0.612]	[0.144,0.671]	[0.088,0.683]	[0.098,0.668]	[-0.048,0.467]
Bias-corrected	0.412***	0.405***	0.368***	0.418***	0.371**	0.413***	0.271**
	(0.137)	(0.134)	(0.134)	(0.134)	(0.152)	(0.145)	(0.131)
	[0.144,0.680]	[0.142,0.667]	[0.106,0.631]	[0.155,0.681]	[0.074,0.668]	[0.129,0.698]	[0.013,0.528]
Robust	0.412***	0.405***	0.368**	0.418***	0.371**	0.413**	0.271*
	(0.159)	(0.156)	(0.155)	(0.146)	(0.168)	(0.172)	(0.152)
	[0.100,0.724]	[0.098,0.711]	[0.065,0.672]	[0.132,0.704]	[0.043,0.700]	[0.077,0.750]	[-0.028,0.569]
Controls:							
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Kernel	Triangular	Triangular	Triangular	Triangular	Triangular	Epanechnikov	Uniform
Bandwidth Selection	MSE-optimal	MSE two	CER-optimal	CER two	MSE-optimal	MSE-optimal	MSE-optimal
Order Loc. Poly. (p)	1	1	1	1	2	1	1
Mean Dep. Var.	5.849	5.878	5.819	5.856	5.871	5.849	5.844
SD Dep. Var.	0.924	0.929	0.939	0.926	0.927	0.925	0.921
Observations	5,682	5,682	5,682	5,682	5,682	5,682	5,682
Eff. Obs. at the Left ; Right	655 ; 985	1221 ; 882	382 ; 849	742 ; 626	1296 ; 1460	655 ; 945	867 ; 1101
Eff. Schools at the Left ; Right	17 ; 25	32 ; 31	10 ; 21	20 ; 26	35 ; 35	17 ; 24	24 ; 27

Notes: The Table reports the RD specification estimates associating Math Score with the ICSC index. The table reports three different estimates for each estimation: Conventional, Bias-Corrected, and Robust-Bias-Corrected. According to Cattaneo et al. (2020), the estimate considered is the Conventional, while the Confidence Interval and p-value of the Robust-Bias-Corrected estimate are taken into account for inference; see text for details. In all specifications, the dependent variable is are the results from *Aristas* math standardized tests conducted by INEEd in 2017 and 2020 to sixth graders. The ICSC index measures the vulnerability of the area where the school is located according to socio-economic indicators; see text for details. It is rescaled in such a way that a school is eligible to be APRENDER if its index is higher than zero; otherwise, it should be UC. Each (1)-(7) column specifies different model specifications detailed in them. (2)-(4) include different bandwidth selection methods, (5) includes different order of the Local Polynomial, (6)-(7) include different kernel functions. All specifications implement a sharp RD design due to perfect compliance. Year and region fixed effects are implemented in every specification. Clusters at the school level are taken in every specification. Kernel indicates how the observations are weighted. Bandwidth Selection indicates the criteria used to choose bandwidth. Order Loc. Poly. (p) indicates the order of the local polynomial used for the estimation. The mean and standard deviation of the dependent variable are measured inside the bandwidth used for the estimation. Effective observations are those that are taken into account in local estimations. Standard errors in parenthesis. Confidence Intervals in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Table 38: **Sensitivity to observations near the cutoff: Belonging Score in sixth grade**

	(1) 0	(2) 0.01	(3) 0.02	(4) 0.03
Conventional	-0.310**	-0.344**	-0.477***	-0.493***
	(0.145)	(0.151)	(0.176)	(0.185)
	[-0.595,-0.025]	[-0.641,-0.048]	[-0.821,-0.133]	[-0.857,-0.130]
Bias-corrected	-0.378***	-0.413***	-0.575***	-0.598***
	(0.145)	(0.151)	(0.176)	(0.185)
	[-0.662,-0.093]	[-0.710,-0.116]	[-0.919,-0.231]	[-0.961,-0.234]
Robust	-0.378**	-0.413**	-0.575***	-0.598***
	(0.170)	(0.177)	(0.205)	(0.216)
	[-0.712,-0.043]	[-0.760,-0.066]	[-0.977,-0.172]	[-1.022,-0.174]
Controls:				
Year FE	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes
Kernel	Triangular	Triangular	Triangular	Triangular
Bandwidth Selection	MSE-optimal	MSE-optimal	MSE-optimal	MSE-optimal
Order Loc. Poly. (p)	1	1	1	1
Mean Dep. Var.	5.894	5.895	5.868	5.883
SD Dep. Var.	0.985	0.984	0.984	0.983
Observations	5,723	5,705	5,644	5,618
Eff. Obs. at the Left ; Right	750 ; 1014	750 ; 996	668 ; 858	709 ; 935
Eff. Schools at the Left ; Right	20 ; 26	20 ; 25	17 ; 21	18 ; 23

Notes: The Table reports the RD specification estimates associating Language tests results with the ICSC index. The table reports three different estimates for each estimation: Conventional, Bias-Corrected, and Robust-Bias-Corrected. According to Cattaneo et al. (2020), the estimate considered is the Conventional, while the Confidence Interval and p-value of the Robust-Bias-Corrected estimate are taken into account for inference; see text for details. In all specifications, the dependent variable are the results from *Aristas* language standardized tests conducted by INEEd in 2017 and 2020 to sixth graders. The ICSC index measures the vulnerability of the area where the school is located according to socio-economic indicators; see text for details. It is rescaled in such a way that a school is eligible to be APRENDER if its index is higher than zero; otherwise, it should be UC. Each (1)-(4) column specifies the same model for different ranges of observations near the cutoff excluded. The range excluded on each side of the cutoff is detailed in them. All specifications implement a sharp RD design due to perfect compliance. Year and region fixed effects are implemented in every specification. Clusters at the school level are taken in every specification. Kernel indicates how the observations are weighted. Bandwidth Selection indicates the criteria used to choose bandwidth. Order Loc. Poly. (p) indicates the order of the local polynomial used for the estimation. The mean and standard deviation of the dependent variable are measured inside the bandwidth used for the estimation. Effective observations are those that are taken into account in local estimations. Standard errors in parenthesis. Confidence Intervals in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Table 39: **Sensitivity to different specifications: Belonging Score in sixth grade**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Conventional	-0.310**	-0.342**	-0.239	-0.271*	-0.351*	-0.335**	-0.168
	(0.145)	(0.143)	(0.157)	(0.160)	(0.180)	(0.150)	(0.144)
	[-0.595,-0.025]	[-0.623,-0.062]	[-0.546,0.069]	[-0.583,0.042]	[-0.704,0.001]	[-0.629,-0.041]	[-0.450,0.115]
Bias-corrected	-0.378***	-0.419***	-0.281*	-0.318**	-0.382**	-0.409***	-0.213
	(0.145)	(0.143)	(0.157)	(0.160)	(0.180)	(0.150)	(0.144)
	[-0.662,-0.093]	[-0.700,-0.139]	[-0.589,0.026]	[-0.630,-0.005]	[-0.735,-0.030]	[-0.702,-0.115]	[-0.495,0.070]
Robust	-0.378**	-0.419**	-0.281	-0.318*	-0.382*	-0.409**	-0.213
	(0.170)	(0.170)	(0.182)	(0.182)	(0.214)	(0.176)	(0.165)
	[-0.712,-0.043]	[-0.752,-0.087]	[-0.638,0.075]	[-0.674,0.038]	[-0.802,0.038]	[-0.753,-0.064]	[-0.535,0.110]
Controls:							
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Kernel	Triangular	Triangular	Triangular	Triangular	Triangular	Epanechnikov	Uniform
Bandwidth Selection	MSE-optimal	MSE two	CER-optimal	CER two	MSE-optimal	MSE-optimal	MSE-optimal
Order Loc. Poly. (p)	1	1	1	1	2	1	1
Mean Dep. Var.	-0.157	-0.157	-0.152	-0.131	-0.138	-0.155	-0.143
SD Dep. Var.	1.079	1.079	1.090	1.083	1.064	1.079	1.065
Observations	5,723	5,723	5,723	5,723	5,723	5,723	5,723
Eff. Obs. at the Left ; Right	750 ; 1014	750 ; 1270	517 ; 866	428 ; 1014	1292 ; 1298	735 ; 1014	1253 ; 1270
Eff. Schools at the Left ; Right	20 ; 26	20 ; 26	12 ; 22	11 ; 21	34 ; 32	19 ; 26	32 ; 31

Notes: The Table reports the RD specification estimates associating Belonging Score with the ICSC index. The table reports three different estimates for each estimation: Conventional, Bias-Corrected, and Robust-Bias-Corrected. According to Cattaneo et al. (2020), the estimate considered is the Conventional, while the Confidence Interval and p-value of the Robust-Bias-Corrected estimate are taken into account for inference; see text for details. In all specifications, the dependent variable is are the results from *Aristas* belonging standardized tests conducted by INEEd in 2017 and 2020 to sixth graders. The ICSC index measures the vulnerability of the area where the school is located according to socio-economic indicators; see text for details. It is rescaled in such a way that a school is eligible to be APRENDER if its index is higher than zero; otherwise, it should be UC. Each (1)-(7) column specifies different model specifications detailed in them. (2)-(4) include different bandwidth selection methods, (5) includes different order of the Local Polynomial, (6)-(7) include different kernel functions. All specifications implement a sharp RD design due to perfect compliance. Year and region fixed effects are implemented in every specification. Clusters at the school level are taken in every specification. Kernel indicates how the observations are weighted. Bandwidth Selection indicates the criteria used to choose bandwidth. Order Loc. Poly. (p) indicates the order of the local polynomial used for the estimation. The mean and standard deviation of the dependent variable are measured inside the bandwidth used for the estimation. Effective observations are those that are taken into account in local estimations. Standard errors in parenthesis. Confidence Intervals in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Table 40: **Sensitivity to observations near the cutoff: Interpersonal Abilities in sixth grade**

	(1) 0	(2) 0.01	(3) 0.02	(4) 0.03
Conventional	-0.206*	-0.209	-0.187	-0.241
	(0.124)	(0.128)	(0.141)	(0.152)
	[-0.450,0.038]	[-0.460,0.041]	[-0.463,0.089]	[-0.539,0.057]
Bias-corrected	-0.247**	-0.251**	-0.224	-0.283*
	(0.124)	(0.128)	(0.141)	(0.152)
	[-0.490,-0.003]	[-0.502,-0.001]	[-0.500,0.052]	[-0.581,0.014]
Robust	-0.247*	-0.251*	-0.224	-0.283
	(0.144)	(0.148)	(0.168)	(0.181)
	[-0.528,0.035]	[-0.541,0.039]	[-0.553,0.104]	[-0.638,0.071]
Controls:				
Year FE	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes
Kernel	Triangular	Triangular	Triangular	Triangular
Bandwidth Selection	MSE-optimal	MSE-optimal	MSE-optimal	MSE-optimal
Order Loc. Poly. (p)	1	1	1	1
Mean Dep. Var.	5.928	5.923	5.927	5.916
SD Dep. Var.	0.986	0.984	0.982	0.974
Observations	5,650	5,630	5,571	5,545
Eff. Obs. at the Left ; Right	1368 ; 1499	1292 ; 1414	1292 ; 1247	1138 ; 1083
Eff. Schools at the Left ; Right	37 ; 36	35 ; 34	35 ; 30	29 ; 25

Notes: The Table reports the RD specification estimates associating Language tests results with the ICSC index. The table reports three different estimates for each estimation: Conventional, Bias-Corrected, and Robust-Bias-Corrected. According to Cattaneo et al. (2020), the estimate considered is the Conventional, while the Confidence Interval and p-value of the Robust-Bias-Corrected estimate are taken into account for inference; see text for details. In all specifications, the dependent variable are the results from *Aristas* language standardized tests conducted by INEEd in 2017 and 2020 to sixth graders. The ICSC index measures the vulnerability of the area where the school is located according to socio-economic indicators; see text for details. It is rescaled in such a way that a school is eligible to be APRENDER if its index is higher than zero; otherwise, it should be UC. Each (1)-(4) column specifies the same model for different ranges of observations near the cutoff excluded. The range excluded on each side of the cutoff is detailed in them. All specifications implement a sharp RD design due to perfect compliance. Year and region fixed effects are implemented in every specification. Clusters at the school level are taken in every specification. Kernel indicates how the observations are weighted. Bandwidth Selection indicates the criteria used to choose bandwidth. Order Loc. Poly. (p) indicates the order of the local polynomial used for the estimation. The mean and standard deviation of the dependent variable are measured inside the bandwidth used for the estimation. Effective observations are those that are taken into account in local estimations. Standard errors in parenthesis. Confidence Intervals in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Table 41: **Sensitivity to different specifications: Interpersonal Abilities in sixth grade**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Conventional	-0.206*	-0.185	-0.210	-0.200	-0.254*	-0.199	-0.183
	(0.124)	(0.127)	(0.130)	(0.130)	(0.146)	(0.129)	(0.131)
	[-0.450,0.038]	[-0.433,0.064]	[-0.465,0.046]	[-0.456,0.055]	[-0.541,0.032]	[-0.451,0.053]	[-0.440,0.074]
Bias-corrected	-0.247**	-0.224*	-0.234*	-0.227*	-0.276*	-0.244*	-0.232*
	(0.124)	(0.127)	(0.130)	(0.130)	(0.146)	(0.129)	(0.131)
	[-0.490,-0.003]	[-0.473,0.024]	[-0.490,0.021]	[-0.482,0.029]	[-0.563,0.010]	[-0.496,0.008]	[-0.489,0.025]
Robust	-0.247*	-0.224	-0.234	-0.227	-0.276*	-0.244	-0.232
	(0.144)	(0.146)	(0.144)	(0.145)	(0.160)	(0.149)	(0.154)
	[-0.528,0.035]	[-0.510,0.062]	[-0.516,0.047]	[-0.510,0.057]	[-0.590,0.037]	[-0.536,0.048]	[-0.534,0.071]
Controls:							
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Kernel	Triangular	Triangular	Triangular	Triangular	Triangular	Epanechnikov	Uniform
Bandwidth Selection	MSE-optimal	MSE two	CER-optimal	CER two	MSE-optimal	MSE-optimal	MSE-optimal
Order Loc. Poly. (p)	1	1	1	1	2	1	1
Mean Dep. Var.	4.727	4.737	4.704	4.706	4.731	4.719	4.709
SD Dep. Var.	1.010	1.011	1.020	1.020	1.013	1.011	1.020
Observations	5,650	5,650	5,650	5,650	5,650	5,650	5,650
Eff. Obs. at the Left ; Right	1368 ; 1499	1510 ; 1162	1059 ; 1162	1175 ; 1018	1862 ; 2171	1292 ; 1326	1164 ; 1162
Eff. Schools at the Left ; Right	37 ; 36	42 ; 37	28 ; 28	31 ; 29	53 ; 50	35 ; 33	30 ; 28

Notes: The Table reports the RD specification estimates associating Interpersonal Abilities with the ICSC index. The table reports three different estimates for each estimation: Conventional, Bias-Corrected, and Robust-Bias-Corrected. According to Cattaneo et al. (2020), the estimate considered is the Conventional, while the Confidence Interval and p-value of the Robust-Bias-Corrected estimate are taken into account for inference; see text for details. In all specifications, the dependent variable is are the results from *Aristas* Interpersonal abilities standardized tests conducted by INEEd in 2017 and 2020 to sixth graders. The ICSC index measures the vulnerability of the area where the school is located according to socio-economic indicators; see text for details. It is rescaled in such a way that a school is eligible to be APRENDER if its index is higher than zero; otherwise, it should be UC. Each (1)-(7) column specifies different model specifications detailed in them. (2)-(4) include different bandwidth selection methods, (5) includes different order of the Local Polynomial, (6)-(7) include different kernel functions. All specifications implement a sharp RD design due to perfect compliance. Year and region fixed effects are implemented in every specification. Clusters at the school level are taken in every specification. Kernel indicates how the observations are weighted. Bandwidth Selection indicates the criteria used to choose bandwidth. Order Loc. Poly. (p) indicates the order of the local polynomial used for the estimation. The mean and standard deviation of the dependent variable are measured inside the bandwidth used for the estimation. Effective observations are those that are taken into account in local estimations. Standard errors in parenthesis. Confidence Intervals in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

G Appendix: Heterogenous effects - Robustness analysis

Table 42: **Sensitivity to observations near the cutoff: Language Score for Males**

	(1) 0	(2) 0.01	(3) 0.02	(4) 0.03
Conventional	0.284**	0.363***	0.526***	0.528***
	(0.112)	(0.103)	(0.093)	(0.104)
	[0.065,0.504]	[0.161,0.564]	[0.343,0.709]	[0.325,0.731]
Bias-corrected	0.338***	0.424***	0.591***	0.599***
	(0.112)	(0.103)	(0.093)	(0.104)
	[0.118,0.557]	[0.222,0.626]	[0.409,0.774]	[0.396,0.801]
Robust	0.338***	0.424***	0.591***	0.599***
	(0.130)	(0.127)	(0.119)	(0.130)
	[0.082,0.593]	[0.176,0.672]	[0.357,0.825]	[0.343,0.854]
Controls:				
Grade FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes
Kernel	Triangular	Triangular	Triangular	Triangular
Bandwidth Selection	MSE-optimal	MSE-optimal	MSE-optimal	MSE-optimal
Order Loc. Poly. (p)	1	1	1	1
Mean Dep. Var.	5.761	5.754	5.726	5.723
SD Dep. Var.	0.963	0.961	0.959	0.961
Observations	5,567	5,546	5,480	5,460
Eff. Obs. at the Left ; Right	557 ; 960	353 ; 829	291 ; 637	271 ; 637
Eff. Schools at the Left ; Right	14 ; 25	10 ; 21	8 ; 15	7 ; 15

Notes: The Table reports the RD specification estimates associating tests results with the ICSC index. The table reports three different estimates for each estimation: Conventional, Bias-Corrected, and Robust-Bias-Corrected. According to Cattaneo et al. (2020), the estimate considered is the Conventional, while the Confidence Interval and p-value of the Robust-Bias-Corrected estimate are taken into account for inference; see text for details. In all specifications, the dependent variable are the results from *Aristas* language standardized tests conducted by INEEd in 2017 and 2020 to third and sixth graders. The ICSC index measures the vulnerability of the area where the school is located according to socio-economic indicators; see text for details. It is rescaled in such a way that a school is eligible to be APRENDER if its index is higher than zero; otherwise, it should be UC. Each (1)-(5) column specifies the same model for different ranges of observations near the cutoff excluded. The range excluded on each side of the cutoff is detailed in them. All specifications implement a sharp RD design due to perfect compliance. Grade, year, and region fixed effects are implemented in every specification. Clusters at the school level are taken in every specification. Kernel indicates how the observations are weighted. Bandwidth Selection indicates the criteria used to choose bandwidth. Order Loc. Poly. (p) indicates the order of the local polynomial used for the estimation. The mean and standard deviation of the dependent variable are measured inside the bandwidth used for the estimation. Effective observations are those that are taken into account in local estimations. Standard errors in parenthesis. Confidence Intervals in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Table 43: **Sensitivity to different specifications: Language Score for Males**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Conventional	0.284**	0.271**	0.268**	0.268**	0.346**	0.283**	0.248***
	(0.112)	(0.118)	(0.123)	(0.133)	(0.145)	(0.111)	(0.091)
	[0.065,0.504]	[0.039,0.502]	[0.027,0.509]	[0.008,0.528]	[0.062,0.630]	[0.065,0.501]	[0.069,0.427]
Bias-corrected	0.338***	0.308***	0.299**	0.288**	0.355**	0.340***	0.235**
	(0.112)	(0.118)	(0.123)	(0.133)	(0.145)	(0.111)	(0.091)
	[0.118,0.557]	[0.077,0.539]	[0.058,0.540]	[0.028,0.547]	[0.071,0.640]	[0.122,0.558]	[0.056,0.413]
Robust	0.338***	0.308**	0.299**	0.288*	0.355**	0.340***	0.235**
	(0.130)	(0.143)	(0.136)	(0.148)	(0.172)	(0.128)	(0.116)
	[0.082,0.593]	[0.028,0.588]	[0.032,0.566]	[-0.002,0.577]	[0.019,0.692]	[0.088,0.591]	[0.008,0.461]
Controls:							
Grade FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Kernel	Triangular	Triangular	Triangular	Triangular	Triangular	Epanechnikov	Uniform
Bandwidth Selection	MSE-optimal	MSE two	CER-optimal	CER two	MSE-optimal	MSE-optimal	MSE-optimal
Order Loc. Poly. (p)	1	1	1	1	2	1	1
Mean Dep. Var.	5.761	5.754	5.751	5.737	5.794	5.756	5.790
SD Dep. Var.	0.963	0.958	0.959	0.954	0.956	0.959	0.957
Observations	5,567	5,567	5,567	5,567	5,567	5,567	5,567
Eff. Obs. at the Left ; Right	557 ; 960	396 ; 850	325 ; 850	291 ; 618	1164 ; 1223	518 ; 960	828 ; 1108
Eff. Schools at the Left ; Right	14 ; 25	11 ; 22	9 ; 22	8 ; 16	31 ; 30	13 ; 25	24 ; 28

Notes: The Table reports the RD specification estimates associating tests results with the ICSC index. The table reports three different estimates for each estimation: Conventional, Bias-Corrected, and Robust-Bias-Corrected. According to Cattaneo et al. (2020), the estimate considered is the Conventional, while the Confidence Interval and p-value of the Robust-Bias-Corrected estimate are taken into account for inference; see text for details. In all specifications, the dependent variable are the results from *Aristas* language standardized tests conducted by INEEd in 2017 and 2020 to third and sixth graders. The ICSC index measures the vulnerability of the area where the school is located according to socio-economic indicators; see text for details. It is rescaled in such a way that a school is eligible to be APRENDER if its index is higher than zero; otherwise, it should be UC. Each (1)-(7) column specifies different model specifications detailed in them. (2)-(4) include different bandwidth selection methods, (5) includes different order of the Local Polynomial, (6)-(7) include different kernel functions. All specifications implement a sharp RD design due to perfect compliance. Grade, year, and region fixed effects are implemented in every specification. Clusters at the school level are taken in every specification. Kernel indicates how the observations are weighted. Bandwidth Selection indicates the criteria used to choose bandwidth. Order Loc. Poly. (p) indicates the order of the local polynomial used for the estimation. The mean and standard deviation of the dependent variable are measured inside the bandwidth used for the estimation. Effective observations are those that are taken into account in local estimations. Standard errors in parenthesis. Confidence Intervals in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Table 44: **Sensitivity to observations near the cutoff: Language Score for Females**

	(1) 0	(2) 0.01	(3) 0.02	(4) 0.03
Conventional	0.370***	0.385***	0.294*	0.284
	(0.120)	(0.133)	(0.172)	(0.175)
	[0.135,0.606]	[0.125,0.645]	[-0.042,0.631]	[-0.058,0.627]
Bias-corrected	0.404***	0.410***	0.325*	0.323*
	(0.120)	(0.133)	(0.172)	(0.175)
	[0.168,0.639]	[0.150,0.670]	[-0.012,0.662]	[-0.020,0.665]
Robust	0.404***	0.410***	0.325	0.323
	(0.138)	(0.154)	(0.204)	(0.209)
	[0.133,0.675]	[0.107,0.713]	[-0.075,0.725]	[-0.086,0.731]
Controls:				
Grade FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes
Kernel	Triangular	Triangular	Triangular	Triangular
Bandwidth Selection	MSE-optimal	MSE-optimal	MSE-optimal	MSE-optimal
Order Loc. Poly. (p)	1	1	1	1
Mean Dep. Var.	6.013	6.013	6.009	6.013
SD Dep. Var.	0.955	0.952	0.950	0.951
Observations	5,624	5,612	5,569	5,542
Eff. Obs. at the Left ; Right	650 ; 903	479 ; 832	545 ; 827	518 ; 827
Eff. Schools at the Left ; Right	17 ; 25	12 ; 22	13 ; 21	12 ; 21

Notes: The Table reports the RD specification estimates associating tests results with the ICSC index. The table reports three different estimates for each estimation: Conventional, Bias-Corrected, and Robust-Bias-Corrected. According to Cattaneo et al. (2020), the estimate considered is the Conventional, while the Confidence Interval and p-value of the Robust-Bias-Corrected estimate are taken into account for inference; see text for details. In all specifications, the dependent variable are the results from *Aristas* language standardized tests conducted by INEEd in 2017 and 2020 to third and sixth graders. The ICSC index measures the vulnerability of the area where the school is located according to socio-economic indicators; see text for details. It is rescaled in such a way that a school is eligible to be APRENDER if its index is higher than zero; otherwise, it should be UC. Each (1)-(5) column specifies the same model for different ranges of observations near the cutoff excluded. The range excluded on each side of the cutoff is detailed in them. All specifications implement a sharp RD design due to perfect compliance. Grade, year, and region fixed effects are implemented in every specification. Clusters at the school level are taken in every specification. Kernel indicates how the observations are weighted. Bandwidth Selection indicates the criteria used to choose bandwidth. Order Loc. Poly. (p) indicates the order of the local polynomial used for the estimation. The mean and standard deviation of the dependent variable are measured inside the bandwidth used for the estimation. Effective observations are those that are taken into account in local estimations. Standard errors in parenthesis. Confidence Intervals in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Table 45: **Sensitivity to different specifications: Language Score for Females**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Conventional	0.370***	0.359***	0.328***	0.322***	0.435***	0.361***	0.390***
	(0.120)	(0.122)	(0.124)	(0.125)	(0.134)	(0.127)	(0.134)
	[0.135,0.606]	[0.120,0.598]	[0.085,0.572]	[0.077,0.567]	[0.173,0.698]	[0.111,0.610]	[0.128,0.653]
Bias-corrected	0.404***	0.379***	0.346***	0.331***	0.471***	0.392***	0.453***
	(0.120)	(0.122)	(0.124)	(0.125)	(0.134)	(0.127)	(0.134)
	[0.168,0.639]	[0.140,0.618]	[0.102,0.589]	[0.086,0.576]	[0.209,0.734]	[0.143,0.642]	[0.190,0.715]
Robust	0.404***	0.379***	0.346**	0.331**	0.471***	0.392***	0.453***
	(0.138)	(0.144)	(0.136)	(0.140)	(0.147)	(0.146)	(0.148)
	[0.133,0.675]	[0.097,0.661]	[0.080,0.612]	[0.056,0.605]	[0.183,0.759]	[0.105,0.679]	[0.163,0.742]
Controls:							
Grade FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Kernel	Triangular	Triangular	Triangular	Triangular	Triangular	Epanechnikov	Uniform
Bandwidth Selection	MSE-optimal	MSE two	CER-optimal	CER two	MSE-optimal	MSE-optimal	MSE-optimal
Order Loc. Poly. (p)	1	1	1	1	2	1	1
Mean Dep. Var.	6.013	6.024	5.986	5.971	6.039	6.015	5.991
SD Dep. Var.	0.955	0.955	0.946	0.934	0.949	0.950	0.945
Observations	5,624	5,624	5,624	5,624	5,624	5,624	5,624
Eff. Obs. at the Left ; Right	650 ; 903	545 ; 903	327 ; 810	292 ; 810	1417 ; 1444	545 ; 882	353 ; 810
Eff. Schools at the Left ; Right	17 ; 25	13 ; 23	9 ; 22	8 ; 18	39 ; 37	13 ; 24	10 ; 22

Notes: The Table reports the RD specification estimates associating tests results with the ICSC index. The table reports three different estimates for each estimation: Conventional, Bias-Corrected, and Robust-Bias-Corrected. According to Cattaneo et al. (2020), the estimate considered is the Conventional, while the Confidence Interval and p-value of the Robust-Bias-Corrected estimate are taken into account for inference; see text for details. In all specifications, the dependent variable are the results from *Aristas* language standardized tests conducted by INEEd in 2017 and 2020 to third and sixth graders. The ICSC index measures the vulnerability of the area where the school is located according to socio-economic indicators; see text for details. It is rescaled in such a way that a school is eligible to be APRENDER if its index is higher than zero; otherwise, it should be UC. Each (1)-(7) column specifies different model specifications detailed in them. (2)-(4) include different bandwidth selection methods, (5) includes different order of the Local Polynomial, (6)-(7) include different kernel functions. All specifications implement a sharp RD design due to perfect compliance. Grade, year, and region fixed effects are implemented in every specification. Clusters at the school level are taken in every specification. Kernel indicates how the observations are weighted. Bandwidth Selection indicates the criteria used to choose bandwidth. Order Loc. Poly. (p) indicates the order of the local polynomial used for the estimation. The mean and standard deviation of the dependent variable are measured inside the bandwidth used for the estimation. Effective observations are those that are taken into account in local estimations. Standard errors in parenthesis. Confidence Intervals in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Table 46: **Sensitivity to observations near the cutoff: Math Score for Females**

	(1) 0	(2) 0.01	(3) 0.02	(4) 0.03
Conventional	0.338**	0.330*	0.357*	0.399**
	(0.163)	(0.170)	(0.183)	(0.203)
	[0.019,0.656]	[-0.003,0.662]	[-0.001,0.715]	[0.001,0.797]
Bias-corrected	0.401**	0.391**	0.427**	0.478**
	(0.163)	(0.170)	(0.183)	(0.203)
	[0.082,0.719]	[0.058,0.723]	[0.069,0.785]	[0.080,0.876]
Robust	0.401**	0.391**	0.427**	0.478**
	(0.189)	(0.198)	(0.211)	(0.236)
	[0.031,0.771]	[0.003,0.778]	[0.013,0.841]	[0.016,0.939]
Controls:				
Grade FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes
Kernel	Triangular	Triangular	Triangular	Triangular
Bandwidth Selection	MSE-optimal	MSE-optimal	MSE-optimal	MSE-optimal
Order Loc. Poly. (p)	1	1	1	1
Mean Dep. Var.	5.946	5.942	5.915	5.916
SD Dep. Var.	0.914	0.911	0.906	0.908
Observations	5,614	5,604	5,561	5,536
Eff. Obs. at the Left ; Right	1183 ; 1139	1000 ; 1045	860 ; 1002	835 ; 1002
Eff. Schools at the Left ; Right	30 ; 29	26 ; 27	24 ; 25	23 ; 25

Notes: The Table reports the RD specification estimates associating tests results with the ICSC index. The table reports three different estimates for each estimation: Conventional, Bias-Corrected, and Robust-Bias-Corrected. According to Cattaneo et al. (2020), the estimate considered is the Conventional, while the Confidence Interval and p-value of the Robust-Bias-Corrected estimate are taken into account for inference; see text for details. In all specifications, the dependent variable are the results from *Aristas* language standardized tests conducted by INEEd in 2017 and 2020 to third and sixth graders. The ICSC index measures the vulnerability of the area where the school is located according to socio-economic indicators; see text for details. It is rescaled in such a way that a school is eligible to be APRENDER if its index is higher than zero; otherwise, it should be UC. Each (1)-(5) column specifies the same model for different ranges of observations near the cutoff excluded. The range excluded on each side of the cutoff is detailed in them. All specifications implement a sharp RD design due to perfect compliance. Grade, year, and region fixed effects are implemented in every specification. Clusters at the school level are taken in every specification. Kernel indicates how the observations are weighted. Bandwidth Selection indicates the criteria used to choose bandwidth. Order Loc. Poly. (p) indicates the order of the local polynomial used for the estimation. The mean and standard deviation of the dependent variable are measured inside the bandwidth used for the estimation. Effective observations are those that are taken into account in local estimations. Standard errors in parenthesis. Confidence Intervals in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Table 47: **Sensitivity to different specifications: Math Score for Females**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Conventional	0.338**	0.364**	0.381**	0.363*	0.381*	0.377**	0.404**
	(0.163)	(0.176)	(0.181)	(0.191)	(0.212)	(0.174)	(0.175)
	[0.019,0.656]	[0.019,0.708]	[0.025,0.736]	[-0.012,0.738]	[-0.034,0.797]	[0.035,0.718]	[0.060,0.747]
Bias-corrected	0.401**	0.410**	0.425**	0.397**	0.359*	0.430**	0.461***
	(0.163)	(0.176)	(0.181)	(0.191)	(0.212)	(0.174)	(0.175)
	[0.082,0.719]	[0.066,0.755]	[0.069,0.780]	[0.022,0.772]	[-0.057,0.774]	[0.089,0.772]	[0.118,0.804]
Robust	0.401**	0.410*	0.425**	0.397*	0.359	0.430**	0.461**
	(0.189)	(0.212)	(0.200)	(0.218)	(0.242)	(0.207)	(0.206)
	[0.031,0.771]	[-0.005,0.826]	[0.033,0.816]	[-0.030,0.824]	[-0.116,0.834]	[0.025,0.836]	[0.056,0.866]
Controls:							
Grade FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Kernel	Triangular	Triangular	Triangular	Triangular	Triangular	Epanechnikov	Uniform
Bandwidth Selection	MSE-optimal	MSE two	CER-optimal	CER two	MSE-optimal	MSE-optimal	MSE-optimal
Order Loc. Poly. (p)	1	1	1	1	2	1	1
Mean Dep. Var.	5.946	5.913	5.914	5.916	5.946	5.920	5.914
SD Dep. Var.	0.914	0.905	0.907	0.910	0.917	0.907	0.907
Observations	5,614	5,614	5,614	5,614	5,614	5,614	5,614
Eff. Obs. at the Left ; Right	1183 ; 1139	798 ; 984	645 ; 984	539 ; 809	1379 ; 1444	718 ; 984	577 ; 900
Eff. Schools at the Left ; Right	30 ; 29	22 ; 28	17 ; 27	13 ; 24	37 ; 37	19 ; 27	14 ; 25

Notes: The Table reports the RD specification estimates associating tests results with the ICSC index. The table reports three different estimates for each estimation: Conventional, Bias-Corrected, and Robust-Bias-Corrected. According to Cattaneo et al. (2020), the estimate considered is the Conventional, while the Confidence Interval and p-value of the Robust-Bias-Corrected estimate are taken into account for inference; see text for details. In all specifications, the dependent variable are the results from *Aristas* language standardized tests conducted by INEEd in 2017 and 2020 to third and sixth graders. The ICSC index measures the vulnerability of the area where the school is located according to socio-economic indicators; see text for details. It is rescaled in such a way that a school is eligible to be APRENDER if its index is higher than zero; otherwise, it should be UC. Each (1)-(7) column specifies different model specifications detailed in them. (2)-(4) include different bandwidth selection methods, (5) includes different order of the Local Polynomial, (6)-(7) include different kernel functions. All specifications implement a sharp RD design due to perfect compliance. Grade, year, and region fixed effects are implemented in every specification. Clusters at the school level are taken in every specification. Kernel indicates how the observations are weighted. Bandwidth Selection indicates the criteria used to choose bandwidth. Order Loc. Poly. (p) indicates the order of the local polynomial used for the estimation. The mean and standard deviation of the dependent variable are measured inside the bandwidth used for the estimation. Effective observations are those that are taken into account in local estimations. Standard errors in parenthesis. Confidence Intervals in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Table 48: **Sensitivity to observations near the cutoff: Language Score for Low Aristas index**

	(1) 0	(2) 0.01	(3) 0.02	(4) 0.03
Conventional	0.327***	0.369***	0.339**	0.334**
	(0.124)	(0.123)	(0.147)	(0.155)
	[0.084,0.570]	[0.129,0.609]	[0.051,0.627]	[0.031,0.637]
Bias-corrected	0.385***	0.436***	0.405***	0.404***
	(0.124)	(0.123)	(0.147)	(0.155)
	[0.142,0.627]	[0.196,0.676]	[0.117,0.694]	[0.101,0.707]
Robust	0.385***	0.436***	0.405**	0.404**
	(0.139)	(0.135)	(0.166)	(0.175)
	[0.111,0.658]	[0.171,0.702]	[0.081,0.730]	[0.061,0.746]
Controls:				
Grade FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes
Kernel	Triangular	Triangular	Triangular	Triangular
Bandwidth Selection	MSE-optimal	MSE-optimal	MSE-optimal	MSE-optimal
Order Loc. Poly. (p)	1	1	1	1
Mean Dep. Var.	5.765	5.770	5.761	5.762
SD Dep. Var.	0.911	0.910	0.903	0.905
Observations	4,404	4,392	4,337	4,322
Eff. Obs. at the Left ; Right	572 ; 790	581 ; 778	629 ; 786	614 ; 786
Eff. Schools at the Left ; Right	19 ; 27	20 ; 26	22 ; 25	21 ; 25

Notes: The Table reports the RD specification estimates associating tests results with the ICSC index. The table reports three different estimates for each estimation: Conventional, Bias-Corrected, and Robust-Bias-Corrected. According to Cattaneo et al. (2020), the estimate considered is the Conventional, while the Confidence Interval and p-value of the Robust-Bias-Corrected estimate are taken into account for inference; see text for details. In all specifications, the dependent variable are the results from *Aristas* language standardized tests conducted by INEEd in 2017 and 2020 to third and sixth graders. The ICSC index measures the vulnerability of the area where the school is located according to socio-economic indicators; see text for details. It is rescaled in such a way that a school is eligible to be APRENDER if its index is higher than zero; otherwise, it should be UC. Each (1)-(5) column specifies the same model for different ranges of observations near the cutoff excluded. The range excluded on each side of the cutoff is detailed in them. All specifications implement a sharp RD design due to perfect compliance. Grade, year, and region fixed effects are implemented in every specification. Clusters at the school level are taken in every specification. Kernel indicates how the observations are weighted. Bandwidth Selection indicates the criteria used to choose bandwidth. Order Loc. Poly. (p) indicates the order of the local polynomial used for the estimation. The mean and standard deviation of the dependent variable are measured inside the bandwidth used for the estimation. Effective observations are those that are taken into account in local estimations. Standard errors in parenthesis. Confidence Intervals in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Table 49: **Sensitivity to different specifications: Language Score for Low Aristas index**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Conventional	0.327***	0.326**	0.290**	0.297**	0.404***	0.323**	0.300**
	(0.124)	(0.127)	(0.115)	(0.118)	(0.135)	(0.131)	(0.138)
	[0.084,0.570]	[0.078,0.574]	[0.064,0.516]	[0.066,0.528]	[0.139,0.670]	[0.067,0.580]	[0.029,0.570]
Bias-corrected	0.385***	0.364***	0.322***	0.320***	0.441***	0.380***	0.368***
	(0.124)	(0.127)	(0.115)	(0.118)	(0.135)	(0.131)	(0.138)
	[0.142,0.627]	[0.116,0.612]	[0.097,0.548]	[0.090,0.551]	[0.176,0.706]	[0.124,0.637]	[0.098,0.639]
Robust	0.385***	0.364***	0.322***	0.320**	0.441***	0.380**	0.368**
	(0.139)	(0.137)	(0.124)	(0.127)	(0.146)	(0.149)	(0.150)
	[0.111,0.658]	[0.095,0.633]	[0.079,0.565]	[0.070,0.570]	[0.155,0.727]	[0.089,0.672]	[0.074,0.663]
Controls:							
Grade FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Kernel	Triangular	Triangular	Triangular	Triangular	Triangular	Epanechnikov	Uniform
Bandwidth Selection	MSE-optimal	MSE two	CER-optimal	CER two	MSE-optimal	MSE-optimal	MSE-optimal
Order Loc. Poly. (p)	1	1	1	1	2	1	1
Mean Dep. Var.	5.765	5.769	5.733	5.751	5.778	5.753	5.733
SD Dep. Var.	0.911	0.911	0.901	0.911	0.905	0.906	0.901
Observations	4,404	4,404	4,404	4,404	4,404	4,404	4,404
Eff. Obs. at the Left ; Right	572 ; 790	581 ; 738	288 ; 664	389 ; 664	1082 ; 1200	463 ; 738	288 ; 664
Eff. Schools at the Left ; Right	19 ; 27	20 ; 27	10 ; 22	12 ; 23	39 ; 37	14 ; 25	10 ; 22

Notes: The Table reports the RD specification estimates associating tests results with the ICSC index. The table reports three different estimates for each estimation: Conventional, Bias-Corrected, and Robust-Bias-Corrected. According to Cattaneo et al. (2020), the estimate considered is the Conventional, while the Confidence Interval and p-value of the Robust-Bias-Corrected estimate are taken into account for inference; see text for details. In all specifications, the dependent variable are the results from *Aristas* language standardized tests conducted by INEEd in 2017 and 2020 to third and sixth graders. The ICSC index measures the vulnerability of the area where the school is located according to socio-economic indicators; see text for details. It is rescaled in such a way that a school is eligible to be APRENDER if its index is higher than zero; otherwise, it should be UC. Each (1)-(7) column specifies different model specifications detailed in them. (2)-(4) include different bandwidth selection methods, (5) includes different order of the Local Polynomial, (6)-(7) include different kernel functions. All specifications implement a sharp RD design due to perfect compliance. Grade, year, and region fixed effects are implemented in every specification. Clusters at the school level are taken in every specification. Kernel indicates how the observations are weighted. Bandwidth Selection indicates the criteria used to choose bandwidth. Order Loc. Poly. (p) indicates the order of the local polynomial used for the estimation. The mean and standard deviation of the dependent variable are measured inside the bandwidth used for the estimation. Effective observations are those that are taken into account in local estimations. Standard errors in parenthesis. Confidence Intervals in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Table 50: **Sensitivity to observations near the cutoff: Math Score for Low Aristas index**

	(1) 0	(2) 0.01	(3) 0.02	(4) 0.03
Conventional	0.248	0.263	0.303*	0.340*
	(0.154)	(0.160)	(0.175)	(0.192)
	[-0.053,0.550]	[-0.051,0.577]	[-0.039,0.646]	[-0.037,0.717]
Bias-corrected	0.305**	0.323**	0.380**	0.428**
	(0.154)	(0.160)	(0.175)	(0.192)
	[0.004,0.607]	[0.009,0.637]	[0.038,0.722]	[0.051,0.805]
Robust	0.305*	0.323*	0.380*	0.428*
	(0.180)	(0.190)	(0.210)	(0.235)
	[-0.047,0.658]	[-0.049,0.695]	[-0.032,0.792]	[-0.032,0.888]
Controls:				
Grade FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes
Kernel	Triangular	Triangular	Triangular	Triangular
Bandwidth Selection	MSE-optimal	MSE-optimal	MSE-optimal	MSE-optimal
Order Loc. Poly. (p)	1	1	1	1
Mean Dep. Var.	5.774	5.783	5.774	5.770
SD Dep. Var.	0.881	0.887	0.896	0.895
Observations	4,427	4,416	4,356	4,339
Eff. Obs. at the Left ; Right	642 ; 855	594 ; 783	451 ; 642	434 ; 642
Eff. Schools at the Left ; Right	22 ; 28	20 ; 26	13 ; 21	12 ; 21

Notes: The Table reports the RD specification estimates associating tests results with the ICSC index. The table reports three different estimates for each estimation: Conventional, Bias-Corrected, and Robust-Bias-Corrected. According to Cattaneo et al. (2020), the estimate considered is the Conventional, while the Confidence Interval and p-value of the Robust-Bias-Corrected estimate are taken into account for inference; see text for details. In all specifications, the dependent variable are the results from *Aristas* language standardized tests conducted by INEEd in 2017 and 2020 to third and sixth graders. The ICSC index measures the vulnerability of the area where the school is located according to socio-economic indicators; see text for details. It is rescaled in such a way that a school is eligible to be APRENDER if its index is higher than zero; otherwise, it should be UC. Each (1)-(5) column specifies the same model for different ranges of observations near the cutoff excluded. The range excluded on each side of the cutoff is detailed in them. All specifications implement a sharp RD design due to perfect compliance. Grade, year, and region fixed effects are implemented in every specification. Clusters at the school level are taken in every specification. Kernel indicates how the observations are weighted. Bandwidth Selection indicates the criteria used to choose bandwidth. Order Loc. Poly. (p) indicates the order of the local polynomial used for the estimation. The mean and standard deviation of the dependent variable are measured inside the bandwidth used for the estimation. Effective observations are those that are taken into account in local estimations. Standard errors in parenthesis. Confidence Intervals in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Table 51: **Sensitivity to different specifications: Math Score for Low Aristas index**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Conventional	0.248	0.228	0.214	0.220	0.272	0.255*	0.168
	(0.154)	(0.156)	(0.165)	(0.168)	(0.192)	(0.150)	(0.134)
	[-0.053,0.550]	[-0.078,0.535]	[-0.109,0.536]	[-0.108,0.549]	[-0.104,0.648]	[-0.038,0.548]	[-0.095,0.431]
Bias-corrected	0.305**	0.270*	0.253	0.247	0.267	0.313**	0.196
	(0.154)	(0.156)	(0.165)	(0.168)	(0.192)	(0.150)	(0.134)
	[0.004,0.607]	[-0.037,0.577]	[-0.070,0.575]	[-0.081,0.576]	[-0.109,0.643]	[0.020,0.606]	[-0.067,0.458]
Robust	0.305*	0.270	0.253	0.247	0.267	0.313*	0.196
	(0.180)	(0.188)	(0.188)	(0.192)	(0.219)	(0.170)	(0.156)
	[-0.047,0.658]	[-0.098,0.638]	[-0.116,0.621]	[-0.128,0.623]	[-0.163,0.697]	[-0.020,0.647]	[-0.110,0.501]
Controls:							
Grade FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Kernel	Triangular	Triangular	Triangular	Triangular	Triangular	Epanechnikov	Uniform
Bandwidth Selection	MSE-optimal	MSE two	CER-optimal	CER two	MSE-optimal	MSE-optimal	MSE-optimal
Order Loc. Poly. (p)	1	1	1	1	2	1	1
Mean Dep. Var.	5.774	5.797	5.771	5.779	5.786	5.780	5.794
SD Dep. Var.	0.881	0.876	0.891	0.888	0.872	0.877	0.877
Observations	4,427	4,427	4,427	4,427	4,427	4,427	4,427
Eff. Obs. at the Left ; Right	642 ; 855	910 ; 741	451 ; 713	585 ; 669	997 ; 1148	680 ; 855	910 ; 938
Eff. Schools at the Left ; Right	22 ; 28	31 ; 29	13 ; 24	19 ; 27	35 ; 36	24 ; 28	31 ; 30

Notes: The Table reports the RD specification estimates associating tests results with the ICSC index. The table reports three different estimates for each estimation: Conventional, Bias-Corrected, and Robust-Bias-Corrected. According to Cattaneo et al. (2020), the estimate considered is the Conventional, while the Confidence Interval and p-value of the Robust-Bias-Corrected estimate are taken into account for inference; see text for details. In all specifications, the dependent variable are the results from *Aristas* language standardized tests conducted by INEEd in 2017 and 2020 to third and sixth graders. The ICSC index measures the vulnerability of the area where the school is located according to socio-economic indicators; see text for details. It is rescaled in such a way that a school is eligible to be APRENDER if its index is higher than zero; otherwise, it should be UC. Each (1)-(7) column specifies different model specifications detailed in them. (2)-(4) include different bandwidth selection methods, (5) includes different order of the Local Polynomial, (6)-(7) include different kernel functions. All specifications implement a sharp RD design due to perfect compliance. Grade, year, and region fixed effects are implemented in every specification. Clusters at the school level are taken in every specification. Kernel indicates how the observations are weighted. Bandwidth Selection indicates the criteria used to choose bandwidth. Order Loc. Poly. (p) indicates the order of the local polynomial used for the estimation. The mean and standard deviation of the dependent variable are measured inside the bandwidth used for the estimation. Effective observations are those that are taken into account in local estimations. Standard errors in parenthesis. Confidence Intervals in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Table 52: **Sensitivity to observations near the cutoff: Language Score for High Aristas index**

	(1) 0	(2) 0.01	(3) 0.02	(4) 0.03
Conventional	0.351***	0.406***	0.360***	0.386**
	(0.115)	(0.118)	(0.139)	(0.153)
	[0.125,0.576]	[0.175,0.637]	[0.088,0.633]	[0.086,0.686]
Bias-corrected	0.362***	0.409***	0.338**	0.373**
	(0.115)	(0.118)	(0.139)	(0.153)
	[0.137,0.587]	[0.178,0.641]	[0.066,0.611]	[0.073,0.673]
Robust	0.362***	0.409***	0.338*	0.373*
	(0.138)	(0.144)	(0.177)	(0.193)
	[0.092,0.632]	[0.128,0.691]	[-0.009,0.686]	[-0.005,0.751]
Controls:				
Grade FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes
Kernel	Triangular	Triangular	Triangular	Triangular
Bandwidth Selection	MSE-optimal	MSE-optimal	MSE-optimal	MSE-optimal
Order Loc. Poly. (p)	1	1	1	1
Mean Dep. Var.	6.033	6.049	6.034	6.032
SD Dep. Var.	1.004	0.984	0.983	0.984
Observations	4,472	4,460	4,406	4,388
Eff. Obs. at the Left ; Right	459 ; 738	345 ; 650	276 ; 596	258 ; 596
Eff. Schools at the Left ; Right	13 ; 25	11 ; 21	9 ; 19	8 ; 19

Notes: The Table reports the RD specification estimates associating tests results with the ICSC index. The table reports three different estimates for each estimation: Conventional, Bias-Corrected, and Robust-Bias-Corrected. According to Cattaneo et al. (2020), the estimate considered is the Conventional, while the Confidence Interval and p-value of the Robust-Bias-Corrected estimate are taken into account for inference; see text for details. In all specifications, the dependent variable are the results from *Aristas* language standardized tests conducted by INEEd in 2017 and 2020 to third and sixth graders. The ICSC index measures the vulnerability of the area where the school is located according to socio-economic indicators; see text for details. It is rescaled in such a way that a school is eligible to be APRENDER if its index is higher than zero; otherwise, it should be UC. Each (1)-(5) column specifies the same model for different ranges of observations near the cutoff excluded. The range excluded on each side of the cutoff is detailed in them. All specifications implement a sharp RD design due to perfect compliance. Grade, year, and region fixed effects are implemented in every specification. Clusters at the school level are taken in every specification. Kernel indicates how the observations are weighted. Bandwidth Selection indicates the criteria used to choose bandwidth. Order Loc. Poly. (p) indicates the order of the local polynomial used for the estimation. The mean and standard deviation of the dependent variable are measured inside the bandwidth used for the estimation. Effective observations are those that are taken into account in local estimations. Standard errors in parenthesis. Confidence Intervals in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Table 53: **Sensitivity to different specifications: Language Score for High Aristas index**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Conventional	0.351***	0.326***	0.290**	0.308**	0.394***	0.363***	0.396***
	(0.115)	(0.116)	(0.132)	(0.121)	(0.138)	(0.121)	(0.127)
	[0.125,0.576]	[0.099,0.553]	[0.032,0.548]	[0.070,0.546]	[0.124,0.664]	[0.125,0.600]	[0.148,0.645]
Bias-corrected	0.362***	0.337***	0.293**	0.315***	0.402***	0.377***	0.461***
	(0.115)	(0.116)	(0.132)	(0.121)	(0.138)	(0.121)	(0.127)
	[0.137,0.587]	[0.110,0.564]	[0.034,0.551]	[0.077,0.553]	[0.132,0.672]	[0.140,0.615]	[0.212,0.709]
Robust	0.362***	0.337**	0.293**	0.315**	0.402**	0.377***	0.461***
	(0.138)	(0.136)	(0.149)	(0.136)	(0.159)	(0.145)	(0.142)
	[0.092,0.632]	[0.072,0.603]	[0.001,0.584]	[0.049,0.581]	[0.090,0.714]	[0.093,0.662]	[0.182,0.740]
Controls:							
Grade FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Kernel	Triangular	Triangular	Triangular	Triangular	Triangular	Epanechnikov	Uniform
Bandwidth Selection	MSE-optimal	MSE two	CER-optimal	CER two	MSE-optimal	MSE-optimal	MSE-optimal
Order Loc. Poly. (p)	1	1	1	1	2	1	1
Mean Dep. Var.	6.033	6.049	6.035	6.051	6.068	6.057	6.038
SD Dep. Var.	1.004	1.003	0.988	1.001	1.005	1.000	0.988
Observations	4,472	4,472	4,472	4,472	4,472	4,472	4,472
Eff. Obs. at the Left ; Right	459 ; 738	657 ; 712	276 ; 662	459 ; 662	1019 ; 1139	406 ; 683	307 ; 662
Eff. Schools at the Left ; Right	13 ; 25	22 ; 28	9 ; 22	13 ; 24	35 ; 36	12 ; 23	10 ; 22

Notes: The Table reports the RD specification estimates associating tests results with the ICSC index. The table reports three different estimates for each estimation: Conventional, Bias-Corrected, and Robust-Bias-Corrected. According to Cattaneo et al. (2020), the estimate considered is the Conventional, while the Confidence Interval and p-value of the Robust-Bias-Corrected estimate are taken into account for inference; see text for details. In all specifications, the dependent variable are the results from *Aristas* language standardized tests conducted by INEEd in 2017 and 2020 to third and sixth graders. The ICSC index measures the vulnerability of the area where the school is located according to socio-economic indicators; see text for details. It is rescaled in such a way that a school is eligible to be APRENDER if its index is higher than zero; otherwise, it should be UC. Each (1)-(7) column specifies different model specifications detailed in them. (2)-(4) include different bandwidth selection methods, (5) includes different order of the Local Polynomial, (6)-(7) include different kernel functions. All specifications implement a sharp RD design due to perfect compliance. Grade, year, and region fixed effects are implemented in every specification. Clusters at the school level are taken in every specification. Kernel indicates how the observations are weighted. Bandwidth Selection indicates the criteria used to choose bandwidth. Order Loc. Poly. (p) indicates the order of the local polynomial used for the estimation. The mean and standard deviation of the dependent variable are measured inside the bandwidth used for the estimation. Effective observations are those that are taken into account in local estimations. Standard errors in parenthesis. Confidence Intervals in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Table 54: **Sensitivity to observations near the cutoff: Math Score for High Aristas index**

	(1) 0	(2) 0.01	(3) 0.02	(4) 0.03
Conventional	0.444***	0.492***	0.497***	0.516***
	(0.138)	(0.144)	(0.180)	(0.195)
	[0.173,0.715]	[0.209,0.776]	[0.145,0.849]	[0.134,0.897]
Bias-corrected	0.510***	0.556***	0.566***	0.598***
	(0.138)	(0.144)	(0.180)	(0.195)
	[0.239,0.781]	[0.273,0.840]	[0.214,0.918]	[0.216,0.980]
Robust	0.510***	0.556***	0.566***	0.598***
	(0.162)	(0.173)	(0.209)	(0.230)
	[0.192,0.827]	[0.218,0.894]	[0.155,0.976]	[0.147,1.049]
Controls:				
Grade FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes
Kernel	Triangular	Triangular	Triangular	Triangular
Bandwidth Selection	MSE-optimal	MSE-optimal	MSE-optimal	MSE-optimal
Order Loc. Poly. (p)	1	1	1	1
Mean Dep. Var.	6.078	6.071	6.068	6.081
SD Dep. Var.	0.954	0.954	0.937	0.949
Observations	4,464	4,452	4,397	4,382
Eff. Obs. at the Left ; Right	584 ; 787	529 ; 722	394 ; 617	431 ; 617
Eff. Schools at the Left ; Right	19 ; 27	17 ; 24	12 ; 20	12 ; 20

Notes: The Table reports the RD specification estimates associating tests results with the ICSC index. The table reports three different estimates for each estimation: Conventional, Bias-Corrected, and Robust-Bias-Corrected. According to Cattaneo et al. (2020), the estimate considered is the Conventional, while the Confidence Interval and p-value of the Robust-Bias-Corrected estimate are taken into account for inference; see text for details. In all specifications, the dependent variable are the results from *Aristas* language standardized tests conducted by INEEd in 2017 and 2020 to third and sixth graders. The ICSC index measures the vulnerability of the area where the school is located according to socio-economic indicators; see text for details. It is rescaled in such a way that a school is eligible to be APRENDER if its index is higher than zero; otherwise, it should be UC. Each (1)-(5) column specifies the same model for different ranges of observations near the cutoff excluded. The range excluded on each side of the cutoff is detailed in them. All specifications implement a sharp RD design due to perfect compliance. Grade, year, and region fixed effects are implemented in every specification. Clusters at the school level are taken in every specification. Kernel indicates how the observations are weighted. Bandwidth Selection indicates the criteria used to choose bandwidth. Order Loc. Poly. (p) indicates the order of the local polynomial used for the estimation. The mean and standard deviation of the dependent variable are measured inside the bandwidth used for the estimation. Effective observations are those that are taken into account in local estimations. Standard errors in parenthesis. Confidence Intervals in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Table 55: **Sensitivity to different specifications: Math Score for High Aristas index**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Conventional	0.444***	0.445***	0.388**	0.380**	0.494***	0.460***	0.497***
	(0.138)	(0.139)	(0.151)	(0.152)	(0.170)	(0.144)	(0.164)
	[0.173,0.715]	[0.172,0.717]	[0.092,0.684]	[0.082,0.677]	[0.162,0.827]	[0.179,0.742]	[0.176,0.818]
Bias-corrected	0.510***	0.502***	0.428***	0.412***	0.520***	0.541***	0.581***
	(0.138)	(0.139)	(0.151)	(0.152)	(0.170)	(0.144)	(0.164)
	[0.239,0.781]	[0.230,0.774]	[0.132,0.723]	[0.114,0.710]	[0.187,0.853]	[0.259,0.823]	[0.260,0.903]
Robust	0.510***	0.502***	0.428**	0.412**	0.520***	0.541***	0.581***
	(0.162)	(0.167)	(0.169)	(0.174)	(0.198)	(0.166)	(0.187)
	[0.192,0.827]	[0.176,0.829]	[0.096,0.760]	[0.070,0.754]	[0.132,0.908]	[0.216,0.865]	[0.214,0.949]
Controls:							
Grade FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Kernel	Triangular	Triangular	Triangular	Triangular	Triangular	Epanechnikov	Uniform
Bandwidth Selection	MSE-optimal	MSE two	CER-optimal	CER two	MSE-optimal	MSE-optimal	MSE-optimal
Order Loc. Poly. (p)	1	1	1	1	2	1	1
Mean Dep. Var.	6.078	6.078	6.046	6.046	6.106	6.078	6.046
SD Dep. Var.	0.954	0.954	0.936	0.936	0.968	0.954	0.936
Observations	4,464	4,464	4,464	4,464	4,464	4,464	4,464
Eff. Obs. at the Left ; Right	584 ; 787	584 ; 787	296 ; 664	296 ; 664	1009 ; 1044	584 ; 787	296 ; 664
Eff. Schools at the Left ; Right	19 ; 27	19 ; 27	10 ; 22	10 ; 22	35 ; 34	19 ; 27	10 ; 22

Notes: The Table reports the RD specification estimates associating tests results with the ICSC index. The table reports three different estimates for each estimation: Conventional, Bias-Corrected, and Robust-Bias-Corrected. According to Cattaneo et al. (2020), the estimate considered is the Conventional, while the Confidence Interval and p-value of the Robust-Bias-Corrected estimate are taken into account for inference; see text for details. In all specifications, the dependent variable are the results from *Aristas* language standardized tests conducted by INEEd in 2017 and 2020 to third and sixth graders. The ICSC index measures the vulnerability of the area where the school is located according to socio-economic indicators; see text for details. It is rescaled in such a way that a school is eligible to be APRENDER if its index is higher than zero; otherwise, it should be UC. Each (1)-(7) column specifies different model specifications detailed in them. (2)-(4) include different bandwidth selection methods, (5) includes different order of the Local Polynomial, (6)-(7) include different kernel functions. All specifications implement a sharp RD design due to perfect compliance. Grade, year, and region fixed effects are implemented in every specification. Clusters at the school level are taken in every specification. Kernel indicates how the observations are weighted. Bandwidth Selection indicates the criteria used to choose bandwidth. Order Loc. Poly. (p) indicates the order of the local polynomial used for the estimation. The mean and standard deviation of the dependent variable are measured inside the bandwidth used for the estimation. Effective observations are those that are taken into account in local estimations. Standard errors in parenthesis. Confidence Intervals in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

H Appendix: Theoretical Framework

We frame our study under the concept of the education production function (Boissere (2004), Todd & Wolpin (2003)). The output would be the level of a specific skill from the student, which depends on different variables related to school and background, referred to as inputs. Under this framework, we combine and extend the models suggested by Cunha & Heckman (2007), Hanushek (2018), and Krueger (1999).

First of all, a student's global ability can be seen as a combination of different N skills in time t:

$$\Theta_t = \phi\left(\theta_t^1, \theta_t^2, ..., \theta_t^N\right) \tag{4}$$

The N skills can be divided into cognitive and non-cognitive skills. Cognitive skills can be, for example, the ability in math or language, whereas non-cognitive skills are related to the socio-emotional sphere of an individual. Interpersonal abilities are an example.

Each specific skill j is defined by:

$$\theta_t^j = f^j\left(\Theta_{t-1}, F_t, S_t\right) \qquad j = 1, ..., N \tag{5}$$

where Θ_{t-1} is the global ability of student in time $t-1$ defined in Equation 4 -modelling skills dynamic complementarity as suggested by Cunha & Heckman (2007). F_t is a vector of inputs the family provides in time t. S_t is a vector of inputs the school provides -teachers' quality (M_t), principal's quality(HM_t), resources (X_t), special activities (SA_t), and infrastructure (IN_t)- that affect students' performance. School resources can be books, computers, or even student workshops. It can be expressed as:

$$S_t = v\left(M_t, HM_t, X_t, SA_t, IN_t\right) \tag{6}$$

In F_t -vector of family inputs- there are family investments, such as the time parents spend helping children with homework or the household resources for studying available for the kid. The number of books is an example of the latter. As indicated by Cunha & Heckman (2007), education can be seen as an investment for families, where the benefits are the expectation of the kid's ability as an adult, and the opportunity cost would be the time and resources devoted to educating the kid. Therefore, F_t can be expressed as:

$$F_t = g\left(\Theta^E_{A,t}, H_t\right) \tag{7}$$

where $\Theta^E_{A,t}$ is the parents' expectation of the global skill their children will have as adults and H_t is the level of human capital of the student's parents.

The parents' expectation of the global skill of their children as adults can be defined as $\Theta^E_{A,t} = E_t[\Theta_A|R_t]$. Thus, this expectation is conditional on R_t, which is the value they give to education.

This value that parents give to education is expressed as $R_t = \gamma(I_t, H_t)$, where I_t is the level of interactions between school and parents regarding their children. As suggested in Islam (2018), Heckman & Mosso (2014), and Das et al. (2013), schools can affect parents' beliefs, increasing their expectations through higher levels of interactions. Through this channel, school actions can affect family investments in kids. I_t can be expressed as:

$$I_t = c(MOT_t, SC_t) \tag{8}$$

where MOT_t is the teacher's motivation and SC_t is the cooperation between the school teaching staff (teachers and principal), which in this paper will be referred to as School Crewing. This concept can refer to the shared knowledge between teaching staff either about the reality of each kid or pedagogical strategies regarding the relationship with parents and teaching approaches.

As mentioned, M_t is the quality of teachers and belongs to the S_t vector. It is defined as:

$$M_t = h(SC_t, P_t, X_t) \tag{9}$$

where SC_t is the previously mentioned School Crewing variable in time t, P_t is the pedagogy applied in time t and X_t are the resources available for teachers in time t. Teachers' pedagogy in time t depends on their accumulated experience up to time t, their training, and their motivation. Therefore, P_t can be expressed as:

$$P_t = w_1(EXP_t, TR_t, MOT_t) \tag{10}$$

with training being a function of past training and motivation, and MOT_t being a function of

School Crewing, school background SB_t, and teachers background TB_t in time t as suggested in Han & Yin (2016):

$$TR_t = w_2(TR_{t-1}, MOT_t) \tag{11}$$

$$MOT_t = w_3(SC_t, SB_t, TB_t) \tag{12}$$

SB_t refers to the characteristics of the school's environment, such as violence or the human capital level of the area. TB_t is defined as all the characteristics that affect teachers' motivation which are independent of their job at the respective school.

On its part, School Crewing can be understood as a function of the time teachers and principals share, the quality of the principals, the school background, and teachers' backgrounds (Kolleck (2019)):

$$SC_t = w_4(T_t, D_t, SB_t, TB_t) \tag{13}$$

The quality of the principals will depend on their motivation, experience, and training.

Dependent variables are defined in such a way that they are increasing in their inputs, as suggested by empirical results in education and economics of education literature (Kolleck (2019), McEwan (2015)).

With this framework, this study can understand the initial shocks and mechanisms behind the APRENDER program more appropriately. APRENDER, as mentioned in Section 3, has three initiatives: *Salas Docentes*, *Trayectorias Protegidas*, and PODES Projects.

Trayectorias Protegidas implies adding a specialized teacher for remedial education. Thus, the application of this initiative can be understood as an improvement in M_t, which will affect slower learners' j skill in the following way:

$$\frac{\delta \theta_t^j}{\delta M_t} = \frac{\delta f^j(\Theta_{t-1}, F_t, S_t)}{\delta S_t} \times \frac{\delta S_t}{\delta M_t} \tag{14}$$

PODES projects imply a shock in resources. This shock could directly affect students due to having a higher level of in-kind resources -either in terms of quantity or quality- or an

indirect effect through teachers as they dispose of a wider kit of tools for teaching. This shock can be expressed in the following way:

$$\frac{\delta\theta_t^j}{\delta X_t} = \frac{\delta\theta_t^j}{\delta S_t} \times \left[\frac{\delta S_t}{\delta X_t} + \frac{\delta S_t}{\delta M_t} \frac{\delta M_t}{\delta X_t} \right] \tag{15}$$

APRENDER schools imply more instances of *Salas Docentes* meetings. This means more time for teachers to spend sharing experiences and relevant information, besides designing strategies for improving students' performance. This shock in the amount of time they collaborate affects School Crewing, a key factor in this model. Higher SC_t implies better information for teachers to tackle student skill formation, but also higher teachers' motivation, as Equation 12 outlines. Consequently, their pedagogy is improved either because of a higher motivation *per se* or because higher motivation triggers their (self-)training. Apart from that, higher SC_t implies better communication with parents (directly or indirectly through teacher motivation). This changes parents' valuation of education R_t, affecting their expectation of their kids' skills as adults. Consequently, providing that the shock is sufficiently important, they will invest differently in their children. This would affect students' skills outcomes. In other words, the effect of *Salas Docentes* can be written as:

$$\begin{aligned}
\frac{\delta\theta_t^j}{\delta T_t} &= \frac{\delta\theta_t^j}{\delta S_t} \times \frac{\delta S_t}{\delta M_t} \left(\frac{\delta M_t}{\delta SC_t} \frac{\delta SC_t}{\delta T_t} + \frac{\delta M_t}{\delta P_t} \left[\frac{\delta P_t}{\delta MOT_t} \frac{\delta MOT_t}{\delta SC_t} \frac{\delta SC_t}{\delta T_t} + \frac{\delta P_t}{\delta TR_t} \frac{\delta TR_t}{\delta MOT_t} \frac{\delta MOT_t}{\delta SC_t} \frac{\delta SC_t}{\delta T_t} \right] \right) \\
&+ \frac{\delta\theta_t^j}{\delta F_t} \frac{\delta F_t}{\delta \Theta_A^E} \frac{\delta \Theta_A^E}{\delta R_t} \frac{\delta R_t}{\delta I_t} \left[\frac{\delta I_t}{\delta SC_t} \frac{\delta SC_t}{\delta T_t} + \frac{\delta I_t}{\delta MOT_t} \frac{\delta MOT_t}{\delta SC_t} \frac{\delta SC_t}{\delta T_t} \right] \\
&= f_S^j v_M \left(h_{SC} w_{4_T} + h_P \left[w_{1_{MOT}} w_{3_{SC}} w_{4_T} + w_{1_{FORM}} w_{2_{MOT}} w_{3_{SC}} w_{4_T} \right] \right) \\
&+ f_F^j g_{\Theta_A^E} \frac{\delta \Theta_A^E}{\delta R_t} \gamma_I \left[c_{SC} w_{4_T} + c_{MOT} w_{3_{SC}} w_{4_T} \right]
\end{aligned} \tag{16}$$

Thus, School Crewing would affect the outcome through all paths in the effect of *Salas Docentes*. It is considered a key factor in the education production function we define in this paper. As Equation 16 reflects, all effects derive from the increase in SC_t due to the time shock reflected in w_{4_T}.

All in all, the contemporary effect of the program is the sum of Equations 14, 15, and 16. While the first two initiatives focus on adding inputs directly to the traditional education production function of students (resources and teachers), the increase in the number of *Salas Docentes* meetings is a strategy for improving cooperation between school staff: School Crewing. Even though students receive the same instruction time as before, thanks to more meetings between teachers, there is a higher level of cooperation and teamwork, allowing them to raise students' skills through the channels explained. The following theorem reflects that the APRENDER effect under this model, holding certain assumptions, is expected to be positive.

Theorem 1 *If all functional forms from the model are two times differentiable and increasing in their inputs at decreasing rates, the effect of APRENDER should be* >0*:*

Proof:

Since $f_S^j > 0$ *and* $\frac{\delta S_t}{\delta M_t} > 0$*, then the effect of Trayectorias Protegidas conditional on the fact that a student receives such remedial education is* $\frac{\delta \theta_t^j}{\delta M_t} > 0$*.*

Secondly, in an analogous way, since X_t *influences positively the school input,* $\frac{\delta S_t}{\delta X_t} > 0$ *and if* $h_X > 0$ *then* $\frac{\delta \theta_t^j}{\delta X_t} > 0$*.*

Thirdly, if all functional forms in Equation 12 in the paper are >0*, therefore* $\frac{\delta \theta_t^j}{\delta T_t} > 0$*.*

Since the APRENDER effect can be contemporaneously understood as the sum of Equations 10, 11, and 12 in the paper, and since all three of them are >0 *providing functional forms are increasing in their inputs, then the effect of a contemporaneous APRENDER shock should be* >0*.*

Moreover, dynamic skill modifications should be considered. If dynamic and complementarity effects are taken into account between the different N *skills as reflected in Equations 1 and 2 in the paper, APRENDER shocks in time* $t-1$ *should have affected student's skills in time* $t-1$*. Therefore, those affected skills should have affected the global skill in time* $t-1$*. This would lead to a shock to each* j *skill in time* t*. Then, if* $\phi' > 0$ *and* $f^j_{\Theta_{t-1}} > 0$*, past shocks from APRENDER program should be positively affecting skills in time* t*.*

Hence, for all of these, the total effect in time t *of APRENDER should be* >0 *driven by present and past exposition to the program.*

I Appendix: Mechanisms

Table 56: **Effect of APRENDER on being part of School Programs**

	PODES		Other School Programs				
	(1) ANEP	(2) *Aristas*	(3) Educ. Camp	(4) Orchard	(5) Scholar Nutrition	(6) PMC	(7) *Escuelas Disfrutables*
Conventional	0.785***	0.584***	-0.166	-0.451*	0.000***	-0.015	-0.433**
	(0.066)	(0.217)	(0.199)	(0.230)	(0.000)	(0.142)	(0.184)
	[0.656,0.914]	[0.158,1.010]	[-0.556,0.225]	[-0.902,0.001]	[0.000,0.000]	[-0.294,0.263]	[-0.793,-0.073]
Bias-corrected	0.768***	0.522**	-0.233	-0.494**	0.025***	-0.067	-0.494***
	(0.066)	(0.217)	(0.199)	(0.230)	(0.000)	(0.142)	(0.184)
	[0.639,0.898]	[0.095,0.948]	[-0.623,0.158]	[-0.945,-0.042]	[0.025,0.025]	[-0.345,0.212]	[-0.854,-0.134]
Robust	0.768***	0.522**	-0.233	-0.494*	0.025	-0.067	-0.494**
	(0.079)	(0.248)	(0.231)	(0.275)	(0.029)	(0.159)	(0.216)
	[0.614,0.923]	[0.035,1.008]	[-0.685,0.219]	[-1.033,0.045]	[-0.032,0.081]	[-0.378,0.245]	[-0.918,-0.069]
Controls:							
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Kernel	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular
Bandwidth Selection	MSE-optimal	MSE-optimal	MSE-optimal	MSE-optimal	MSE-optimal	MSE-optimal	MSE-optimal
Order Loc. Poly. (p)	1	1	1	1	1	1	1
Mean Dep. Var.	0.317	0.488	0.212	0.424	1.000	0.671	0.703
SD Dep. Var.	0.465	0.506	0.412	0.498	0.000	0.473	0.460
Observations	1,585	163	158	158	158	158	158
Eff. Obs. at the Left ; Right	390 ; 303	14 ; 27	33 ; 33	33 ; 33	14 ; 26	37 ; 36	32 ; 32
Eff. Schools at the Left ; Right	206 ; 186	13 ; 24	30 ; 28	30 ; 28	13 ; 23	34 ; 31	29 ; 27

Notes: The Table reports the RD specification estimates associating whether the school is part of a series of educative programs with the ICSC index. The table reports three different estimates for each estimation: Conventional, Bias-Corrected, and Robust-Bias-Corrected. According to Cattaneo et al. (2020), the estimate considered is the Conventional, while the Confidence Interval and p-value of the Robust-Bias-Corrected estimate are taken into account for inference; see text for details. The first two columns estimate the effect of APRENDER on the probability of having a PODES project assigned for both for ANEP and *Aristas* databases. The dependent variable is a dummy indicating whether a school has a PODES project assigned. The other dependent variables are from other school programs not neccesarily intended for the APRENDER program: whether the school has educative camps, if it part of the orchard program, whether the school has scholar nutrition, if it is part of *Programa de Maestros Comunitarios* and whether the school is part of *Escuelas Disfrutables* program. The ICSC index measures the vulnerability of the area where the school is located according to socio-economic indicators; see text for details. It is rescaled in such a way that a school is eligible to be APRENDER if its index is higher than zero; otherwise, it should be UC. All specifications have a sharp RD design due to perfect compliance. Year and region fixed effects are implemented in every specification. For ANEP database data are available at school level for 2017-2019. For *Aristas* database, data are available at school level for 2017 and 2020. Clusters at the school level are taken in every specification. Kernel indicates how the observations are weighted. Bandwidth Selection indicates the criteria used to choose bandwidth. Order Loc. Poly. (p) indicates the order of the local polynomial used for the estimation. The mean and standard deviation of the dependent variable are measured inside the bandwidth used for the estimation. Effective observations are those that are taken into account in local estimations. Standard errors in parenthesis. Confidence Intervals in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

J Appendix: Mechanisms - Robustness analysis

Table 57: **Effect of APRENDER on PODES 2017-2019 with placebo cutoffs**

	(1) -0.75	(2) -0.5	(3) -0.25	(4) 0	(5) 0.25	(6) 0.5	(7) 0.75
Conventional	0.000	0.000	0.000	0.785***	-0.018	-0.138	0.023
	(.)	(.)	(.)	(0.066)	(0.148)	(0.163)	(0.144)
	[0.000,0.000]	[0.000,0.000]	[0.000,0.000]	[0.656,0.914]	[-0.309,0.272]	[-0.458,0.181]	[-0.260,0.305]
Bias-corrected	0.000	0.000	0.000	0.768***	0.018	-0.172	0.048
	(.)	(.)	(.)	(0.066)	(0.148)	(0.163)	(0.144)
	[0.000,0.000]	[0.000,0.000]	[0.000,0.000]	[0.639,0.898]	[-0.273,0.308]	[-0.491,0.148]	[-0.235,0.331]
Robust	0.000	0.000	0.000	0.768***	0.018	-0.172	0.048
	(.)	(.)	(.)	(0.079)	(0.197)	(0.181)	(0.175)
	[0.000,0.000]	[0.000,0.000]	[0.000,0.000]	[0.614,0.923]	[-0.369,0.404]	[-0.527,0.183]	[-0.296,0.391]
Controls:							
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Kernel	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular	Triangular
Bandwidth Selection	MSE-optimal	MSE-optimal	MSE-optimal	MSE-optimal	MSE-optimal	MSE-optimal	MSE-optimal
Order Loc. Poly. (p)	1	1	1	1	1	1	1
Mean Dep. Var.	0.000	0.000	0.000	0.341	0.821	0.710	0.673
SD Dep. Var.	0.000	0.000	0.000	0.474	0.384	0.456	0.470
Observations	851	851	851	1,585	734	734	734
Eff. Obs. at the Left ; Right	426 ; 419	586 ; 259	730 ; 115	390 ; 303	130 ; 71	65 ; 42	78 ; 145
Eff. Schools at the Left ; Right	153 ; 151	210 ; 94	264 ; 40	140 ; 103	45 ; 24	22 ; 14	26 ; 49

Notes: The Table reports the RD specification estimates associating a school having a PODES project assigned with the ICSC index. The table reports three different estimates for each estimation: Conventional, Bias-Corrected, and Robust-Bias-Corrected. According to Cattaneo et al. (2020), the estimate considered is the Conventional, while the Confidence Interval and p-value of the Robust-Bias-Corrected estimate are taken into account for inference; see text for details. In all specifications, the dependent variable is whether a school has assigned a PODES project in a year using data from ANEP. The ICSC index measures the vulnerability of the area where the school is located according to socio-economic indicators; see text for details. It is rescaled in such a way that a school is eligible to be APRENDER if its index is higher than zero; otherwise, it should be UC. Each (1)-(7) column specifies the same model for different selected cutoffs detailed in them. (1)-(3) only include observations with ICSC index lower than 0, whereas (5)-(7) only include observations with ICSC index bigger than 0. Years included in all specifications are 2017-2019. All specifications have a sharp RD design due to perfect compliance. Year and region fixed effects are implemented in every specification. Clusters at the school level are taken in every specification. Kernel indicates how the observations are weighted. Bandwidth Selection indicates the criteria used to choose bandwidth. Order Loc. Poly. (p) indicates the order of the local polynomial used for the estimation. The mean and standard deviation of the dependent variable are measured inside the bandwidth used for the estimation. Effective observations are those that are taken into account in local estimations. Standard errors in parenthesis. Confidence Intervals in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Table 58: **Sensitivity to observations near the cutoff: PODES 2017-2019**

	(1) 0	(2) 0.01	(3) 0.02	(4) 0.03
Conventional	0.785***	0.851***	0.920***	0.918***
	(0.066)	(0.055)	(0.053)	(0.053)
	[0.656,0.914]	[0.744,0.959]	[0.816,1.023]	[0.814,1.022]
Bias-corrected	0.768***	0.865***	0.920***	0.918***
	(0.066)	(0.055)	(0.053)	(0.053)
	[0.639,0.898]	[0.757,0.972]	[0.816,1.024]	[0.814,1.022]
Robust	0.768***	0.865***	0.920***	0.918***
	(0.079)	(0.066)	(0.067)	(0.067)
	[0.614,0.923]	[0.735,0.994]	[0.789,1.050]	[0.787,1.049]
Controls:				
Year FE	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes
Kernel	Triangular	Triangular	Triangular	Triangular
Bandwidth Selection	MSE-optimal	MSE-optimal	MSE-optimal	MSE-optimal
Order Loc. Poly. (p)	1	1	1	1
Mean Dep. Var.	0.341	0.341	0.378	0.380
SD Dep. Var.	0.474	0.474	0.485	0.486
Observations	1,585	1,567	1,555	1,552
Eff. Obs. at the Left ; Right	390 ; 303	395 ; 309	271 ; 237	268 ; 237
Eff. Schools at the Left ; Right	140 ; 103	142 ; 105	98 ; 81	97 ; 81

Notes: The Table reports the RD specification estimates associating a school having a PODES project with the ICSC index. The table reports three different estimates for each estimation: Conventional, Bias-Corrected, and Robust-Bias-Corrected. According to Cattaneo et al. (2020), the estimate considered is the Conventional, while the Confidence Interval and p-value of the Robust-Bias-Corrected estimate are taken into account for inference; see text for details. In all specifications, the dependent variable is whether a school has a PODES project assigned using data from ANEP. The ICSC index measures the vulnerability of the area where the school is located according to socio-economic indicators; see text for details. It is rescaled in such a way that a school is eligible to be APRENDER if its index is higher than zero; otherwise, it should be UC. Each (1)-(4) column specifies the same model for different ranges of observations near the cutoff excluded. The range excluded on each side of the cutoff is detailed in them. Years included in all specifications are 2017-2019. All specifications have a sharp RD design due to perfect compliance. Year and region fixed effects are implemented in every specification. Clusters at the school level are taken in every specification. Kernel indicates how the observations are weighted. Bandwidth Selection indicates the criteria used to choose bandwidth. Order Loc. Poly. (p) indicates the order of the local polynomial used for the estimation. The mean and standard deviation of the dependent variable are measured inside the bandwidth used for the estimation. Effective observations are those that are taken into account in local estimations. Standard errors in parenthesis. Confidence Intervals in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Table 59: **Sensitivity to different specifications: PODES 2017-2019**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Conventional	0.785***	0.782***	0.728***	0.725***	0.656***	0.825***	0.803***
	(0.066)	(0.066)	(0.081)	(0.080)	(0.104)	(0.055)	(0.059)
	[0.656,0.914]	[0.653,0.910]	[0.570,0.885]	[0.568,0.882]	[0.452,0.861]	[0.717,0.934]	[0.686,0.919]
Bias-corrected	0.768***	0.768***	0.718***	0.717***	0.625***	0.834***	0.812***
	(0.066)	(0.066)	(0.081)	(0.080)	(0.104)	(0.055)	(0.059)
	[0.639,0.898]	[0.640,0.896]	[0.560,0.876]	[0.559,0.874]	[0.420,0.829]	[0.726,0.943]	[0.696,0.928]
Robust	0.768***	0.768***	0.718***	0.717***	0.625***	0.834***	0.812***
	(0.079)	(0.079)	(0.090)	(0.090)	(0.114)	(0.069)	(0.073)
	[0.614,0.923]	[0.614,0.922]	[0.541,0.895]	[0.540,0.893]	[0.402,0.848]	[0.700,0.969]	[0.669,0.955]
Controls:							
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Kernel	Triangular	Triangular	Triangular	Triangular	Triangular	Epanechnikov	Uniform
Bandwidth Selection	MSE-optimal	MSE two	CER-optimal	CER two	MSE-optimal	MSE-optimal	MSE-optimal
Order Loc. Poly. (p)	1	1	1	1	2	1	1
Mean Dep. Var.	0.341	0.337	0.377	0.342	0.342	0.341	0.365
SD Dep. Var.	0.474	0.473	0.485	0.475	0.475	0.474	0.482
Observations	1,585	1,585	1,585	1,585	1,585	1,585	1,585
Eff. Obs. at the Left ; Right	390 ; 303	845 ; 303	268 ; 249	768 ; 249	390 ; 309	433 ; 357	314 ; 270
Eff. Schools at the Left ; Right	140 ; 103	304 ; 239	97 ; 85	276 ; 221	140 ; 105	156 ; 121	113 ; 92

Notes: The Table reports the RD specification estimates associating a school having PODES with the ICSC index. The table reports three different estimates for each estimation: Conventional, Bias-Corrected, and Robust-Bias-Corrected. According to Cattaneo et al. (2020), the estimate considered is the Conventional, while the Confidence Interval and p-value of the Robust-Bias-Corrected estimate are taken into account for inference; see text for details. In all specifications, the dependent variable is whether a school has a PODES project assigned using data from ANEP. The ICSC index measures the vulnerability of the area where the school is located according to socio-economic indicators; see text for details. It is rescaled in such a way that a school is eligible to be APRENDER if its index is higher than zero; otherwise, it should be UC. Each (1)-(7) column specifies different model specifications detailed in them. (2)-(4) include different bandwidth selection methods, (5) includes different order of the Local Polynomial, (6)-(7) include different kernel functions. All specifications have a sharp RD design due to perfect compliance. Year and region fixed effects are implemented in every specification. Clusters at the school level are taken in every specification. Kernel indicates how the observations are weighted. Bandwidth Selection indicates the criteria used to choose bandwidth. Order Loc. Poly. (p) indicates the order of the local polynomial used for the estimation. The mean and standard deviation of the dependent variable are measured inside the bandwidth used for the estimation. Effective observations are those that are taken into account in local estimations. Standard errors in parenthesis. Confidence Intervals in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Table 60: **Sensitivity to observations near the cutoff: PODES in Aristas database**

	(1)	(2)	(3)	(4)
	0	0.01	0.02	0.03
Conventional	0.584***	0.353	0.868***	0.938***
	(0.217)	(0.230)	(0.194)	(0.189)
	[0.158,1.010]	[-0.097,0.803]	[0.489,1.248]	[0.567,1.309]
Bias-corrected	0.522**	0.238	0.840***	0.915***
	(0.217)	(0.230)	(0.194)	(0.189)
	[0.095,0.948]	[-0.212,0.688]	[0.460,1.219]	[0.544,1.286]
Robust	0.522**	0.238	0.840***	0.915***
	(0.248)	(0.248)	(0.231)	(0.234)
	[0.035,1.008]	[-0.248,0.725]	[0.387,1.292]	[0.457,1.373]
Controls:				
Year FE	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes
Kernel	Triangular	Triangular	Triangular	Triangular
Bandwidth Selection	MSE-optimal	MSE-optimal	MSE-optimal	MSE-optimal
Order Loc. Poly. (p)	1	1	1	1
Mean Dep. Var.	0.488	0.529	0.545	0.562
SD Dep. Var.	0.506	0.507	0.506	0.504
Observations	163	162	160	159
Eff. Obs. at the Left ; Right	14 ; 27	10 ; 24	11 ; 22	10 ; 22
Eff. Schools at the Left ; Right	13 ; 24	10 ; 21	11 ; 19	10 ; 19

Notes: The Table reports the RD specification estimates associating a school having a PODES project with the ICSC index. The table reports three different estimates for each estimation: Conventional, Bias-Corrected, and Robust-Bias-Corrected. According to Cattaneo et al. (2020), the estimate considered is the Conventional, while the Confidence Interval and p-value of the Robust-Bias-Corrected estimate are taken into account for inference; see text for details. In all specifications, the dependent variable is whether a school has a PODES project assigned using data from Aristas. The ICSC index measures the vulnerability of the area where the school is located according to socio-economic indicators; see text for details. It is rescaled in such a way that a school is eligible to be APRENDER if its index is higher than zero; otherwise, it should be UC. Each (1)-(4) column specifies the same model for different ranges of observations near the cutoff excluded. The range excluded on each side of the cutoff is detailed in them. Years included in all specifications are 2017 and 2020. All specifications have a sharp RD design due to perfect compliance. Year and region fixed effects are implemented in every specification. Clusters at the school level are taken in every specification. Kernel indicates how the observations are weighted. Bandwidth Selection indicates the criteria used to choose bandwidth. Order Loc. Poly. (p) indicates the order of the local polynomial used for the estimation. The mean and standard deviation of the dependent variable are measured inside the bandwidth used for the estimation. Effective observations are those that are taken into account in local estimations. Standard errors in parenthesis. Confidence Intervals in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Table 61: **Sensitivity to different specifications: PODES in Aristas database**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Conventional	0.584***	0.568***	0.485**	0.467*	0.553**	0.618***	0.680***
	(0.217)	(0.214)	(0.243)	(0.241)	(0.231)	(0.212)	(0.196)
	[0.158,1.010]	[0.148,0.988]	[0.009,0.962]	[-0.006,0.940]	[0.100,1.005]	[0.202,1.033]	[0.295,1.064]
Bias-corrected	0.522**	0.509**	0.453*	0.436*	0.498**	0.553***	0.622***
	(0.217)	(0.214)	(0.243)	(0.241)	(0.231)	(0.212)	(0.196)
	[0.095,0.948]	[0.089,0.930]	[-0.023,0.930]	[-0.037,0.909]	[0.045,0.951]	[0.138,0.969]	[0.237,1.006]
Robust	0.522**	0.509**	0.453*	0.436*	0.498*	0.553**	0.622***
	(0.248)	(0.244)	(0.262)	(0.260)	(0.263)	(0.243)	(0.222)
	[0.035,1.008]	[0.030,0.988]	[-0.060,0.966]	[-0.074,0.946]	[-0.018,1.014]	[0.076,1.031]	[0.188,1.056]
Controls:							
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Kernel	Triangular	Triangular	Triangular	Triangular	Triangular	Epanechnikov	Uniform
Bandwidth Selection	MSE-optimal	MSE two	CER-optimal	CER two	MSE-optimal	MSE-optimal	MSE-optimal
Order Loc. Poly. (p)	1	1	1	1	2	1	1
Mean Dep. Var.	0.488	0.354	0.562	0.359	0.381	0.513	0.488
SD Dep. Var.	0.506	0.480	0.504	0.481	0.489	0.506	0.506
Observations	163	163	163	163	163	163	163
Eff. Obs. at the Left ; Right	14 ; 27	82 ; 27	8 ; 24	73 ; 24	40 ; 44	13 ; 26	14 ; 27
Eff. Schools at the Left ; Right	13 ; 24	79 ; 68	8 ; 21	70 ; 63	37 ; 37	12 ; 23	13 ; 24

Notes: The Table reports the RD specification estimates associating a school having PODES with the ICSC index. The table reports three different estimates for each estimation: Conventional, Bias-Corrected, and Robust-Bias-Corrected. According to Cattaneo et al. (2020), the estimate considered is the Conventional, while the Confidence Interval and p-value of the Robust-Bias-Corrected estimate are taken into account for inference; see text for details. In all specifications, the dependent variable is whether a school has a PODES project assigned using data from Aristas. The ICSC index measures the vulnerability of the area where the school is located according to socio-economic indicators; see text for details. It is rescaled in such a way that a school is eligible to be APRENDER if its index is higher than zero; otherwise, it should be UC. Each (1)-(7) column specifies different model specifications detailed in them. (2)-(4) include different bandwidth selection methods, (5) includes different order of the Local Polynomial, (6)-(7) include different kernel functions. All specifications have a sharp RD design due to perfect compliance. Year and region fixed effects are implemented in every specification. Clusters at the school level are taken in every specification. Kernel indicates how the observations are weighted. Bandwidth Selection indicates the criteria used to choose bandwidth. Order Loc. Poly. (p) indicates the order of the local polynomial used for the estimation. The mean and standard deviation of the dependent variable are measured inside the bandwidth used for the estimation. Effective observations are those that are taken into account in local estimations. Standard errors in parenthesis. Confidence Intervals in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Table 62: **Sensitivity to observations near the cutoff: Probability of Having an Orchard Program**

	(1) 0	(2) 0.01	(3) 0.02	(4) 0.03
Conventional	-0.451*	-0.501**	-0.600**	-0.736**
	(0.230)	(0.240)	(0.258)	(0.305)
	[-0.902,0.001]	[-0.972,-0.030]	[-1.105,-0.095]	[-1.333,-0.139]
Bias-corrected	-0.494**	-0.581**	-0.743***	-0.891***
	(0.230)	(0.240)	(0.258)	(0.305)
	[-0.945,-0.042]	[-1.052,-0.110]	[-1.248,-0.238]	[-1.488,-0.294]
Robust	-0.494*	-0.581**	-0.743**	-0.891**
	(0.275)	(0.282)	(0.307)	(0.369)
	[-1.033,0.045]	[-1.135,-0.028]	[-1.344,-0.142]	[-1.614,-0.168]
Controls:				
Year FE	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes
Kernel	Triangular	Triangular	Triangular	Triangular
Bandwidth Selection	MSE-optimal	MSE-optimal	MSE-optimal	MSE-optimal
Order Loc. Poly. (p)	1	1	1	1
Mean Dep. Var.	0.424	0.370	0.289	0.295
SD Dep. Var.	0.498	0.487	0.458	0.462
Observations	158	157	155	154
Eff. Obs. at the Left ; Right	33 ; 33	25 ; 29	20 ; 25	19 ; 25
Eff. Schools at the Left ; Right	30 ; 28	24 ; 25	19 ; 22	18 ; 22

Notes: The Table reports the RD specification estimates associating whether the school has an Orchard Program with the ICSC index. The table reports three different estimates for each estimation: Conventional, Bias-Corrected, and Robust-Bias-Corrected. According to Cattaneo et al. (2020), the estimate considered is the Conventional, while the Confidence Interval and p-value of the Robust-Bias-Corrected estimate are taken into account for inference; see text for details. In all specifications, the dependent variable is whether the school has an Orchard Program using data from Aristas. The ICSC index measures the vulnerability of the area where the school is located according to socio-economic indicators; see text for details. It is rescaled in such a way that a school is eligible to be APRENDER if its index is higher than zero; otherwise, it should be UC. Each (1)-(4) column specifies the same model for different ranges of observations near the cutoff excluded. The range excluded on each side of the cutoff is detailed in them. Years included in all specifications are 2017 and 2020. All specifications have a sharp RD design due to perfect compliance. Year and region fixed effects are implemented in every specification. Clusters at the school level are taken in every specification. Kernel indicates how the observations are weighted. Bandwidth Selection indicates the criteria used to choose bandwidth. Order Loc. Poly. (p) indicates the order of the local polynomial used for the estimation. The mean and standard deviation of the dependent variable are measured inside the bandwidth used for the estimation. Effective observations are those that are taken into account in local estimations. Standard errors in parenthesis. Confidence Intervals in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Table 63: **Sensitivity to different specifications: Probability of Having an Orchard Program**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Conventional	-0.451*	-0.423*	-0.517**	-0.505**	-0.403	-0.518**	-0.474*
	(0.230)	(0.225)	(0.245)	(0.241)	(0.272)	(0.250)	(0.279)
	[-0.902,0.001]	[-0.865,0.018]	[-0.997,-0.037]	[-0.977,-0.033]	[-0.935,0.130]	[-1.009,-0.028]	[-1.021,0.073]
Bias-corrected	-0.494**	-0.396*	-0.544**	-0.489**	-0.392	-0.598**	-0.553**
	(0.230)	(0.225)	(0.245)	(0.241)	(0.272)	(0.250)	(0.279)
	[-0.945,-0.042]	[-0.838,0.046]	[-1.024,-0.064]	[-0.961,-0.017]	[-0.925,0.141]	[-1.088,-0.108]	[-1.099,-0.006]
Robust	-0.494*	-0.396	-0.544**	-0.489*	-0.392	-0.598**	-0.553*
	(0.275)	(0.268)	(0.274)	(0.267)	(0.306)	(0.294)	(0.331)
	[-1.033,0.045]	[-0.922,0.130]	[-1.080,-0.008]	[-1.012,0.034]	[-0.992,0.208]	[-1.174,-0.021]	[-1.202,0.097]
Controls:							
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Kernel	Triangular	Triangular	Triangular	Triangular	Triangular	Epanechnikov	Uniform
Bandwidth Selection	MSE-optimal	MSE two	CER-optimal	CER two	MSE-optimal	MSE-optimal	MSE-optimal
Order Loc. Poly. (p)	1	1	1	1	2	1	1
Mean Dep. Var.	0.424	0.414	0.271	0.286	0.330	0.286	0.265
SD Dep. Var.	0.498	0.496	0.449	0.456	0.472	0.456	0.448
Observations	158	158	158	158	158	158	158
Eff. Obs. at the Left ; Right	33 ; 33	35 ; 26	20 ; 28	21 ; 23	51 ; 58	21 ; 28	11 ; 23
Eff. Schools at the Left ; Right	30 ; 28	32 ; 30	19 ; 25	20 ; 25	48 ; 49	20 ; 25	11 ; 20

Notes: The Table reports the RD specification estimates associating Probability of Having an Orchard Program with the ICSC index. The table reports three different estimates for each estimation: Conventional, Bias-Corrected, and Robust-Bias-Corrected. According to Cattaneo et al. (2020), the estimate considered is the Conventional, while the Confidence Interval and p-value of the Robust-Bias-Corrected estimate are taken into account for inference; see text for details. In all specifications, the dependent variable is Probability of Having an Orchard Program obtained by INEEd in 2017 and 2020 from principals of schools. The ICSC index measures the vulnerability of the area where the school is located according to socio-economic indicators; see text for details. It is rescaled in such a way that a school is eligible to be APRENDER if its index is higher than zero; otherwise, it should be UC. Each (1)-(7) column specifies different model specifications detailed in them. (2)-(4) include different bandwidth selection methods, (5) includes different order of the Local Polynomial, (6)-(7) include different kernel functions. All specifications have a sharp RD design due to perfect compliance. Year and region fixed effects are implemented in every specification. Clusters at the school level are taken in every specification. Kernel indicates how the observations are weighted. Bandwidth Selection indicates the criteria used to choose bandwidth. Order Loc. Poly. (p) indicates the order of the local polynomial used for the estimation. The mean and standard deviation of the dependent variable are measured inside the bandwidth used for the estimation. Effective observations are those that are taken into account in local estimations. Standard errors in parenthesis. Confidence Intervals in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Table 64: **Sensitivity to observations near the cutoff: Probability of Being Part of Escuelas Disfrutables Program**

	(1) 0	(2) 0.01	(3) 0.02	(4) 0.03
Conventional	-0.433**	-0.478**	-0.778***	-0.877***
	(0.184)	(0.205)	(0.209)	(0.207)
	[-0.793,-0.073]	[-0.879,-0.077]	[-1.187,-0.368]	[-1.283,-0.471]
Bias-corrected	-0.494***	-0.539***	-0.871***	-1.000***
	(0.184)	(0.205)	(0.209)	(0.207)
	[-0.854,-0.134]	[-0.940,-0.138]	[-1.281,-0.461]	[-1.407,-0.594]
Robust	-0.494**	-0.539**	-0.871***	-1.000***
	(0.216)	(0.243)	(0.251)	(0.246)
	[-0.918,-0.069]	[-1.014,-0.063]	[-1.364,-0.378]	[-1.483,-0.518]
Controls:				
Year FE	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes
Kernel	Triangular	Triangular	Triangular	Triangular
Bandwidth Selection	MSE-optimal	MSE-optimal	MSE-optimal	MSE-optimal
Order Loc. Poly. (p)	1	1	1	1
Mean Dep. Var.	0.703	0.698	0.644	0.600
SD Dep. Var.	0.460	0.463	0.484	0.496
Observations	158	157	155	154
Eff. Obs. at the Left ; Right	32 ; 32	32 ; 31	20 ; 25	17 ; 23
Eff. Schools at the Left ; Right	29 ; 27	29 ; 26	19 ; 22	16 ; 20

Notes: The Table reports the RD specification estimates associating whether the school is part of Escuelas Disfrutables Program with the ICSC index. The table reports three different estimates for each estimation: Conventional, Bias-Corrected, and Robust-Bias-Corrected. According to Cattaneo et al. (2020), the estimate considered is the Conventional, while the Confidence Interval and p-value of the Robust-Bias-Corrected estimate are taken into account for inference; see text for details. In all specifications, the dependent variable is whether the school is part of Escuelas Disfrutables Program using data from Aristas. The ICSC index measures the vulnerability of the area where the school is located according to socio-economic indicators; see text for details. It is rescaled in such a way that a school is eligible to be APRENDER if its index is higher than zero; otherwise, it should be UC. Each (1)-(4) column specifies the same model for different ranges of observations near the cutoff excluded. The range excluded on each side of the cutoff is detailed in them. Years included in all specifications are 2017 and 2020. All specifications have a sharp RD design due to perfect compliance. Year and region fixed effects are implemented in every specification. Clusters at the school level are taken in every specification. Kernel indicates how the observations are weighted. Bandwidth Selection indicates the criteria used to choose bandwidth. Order Loc. Poly. (p) indicates the order of the local polynomial used for the estimation. The mean and standard deviation of the dependent variable are measured inside the bandwidth used for the estimation. Effective observations are those that are taken into account in local estimations. Standard errors in parenthesis. Confidence Intervals in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Table 65: **Sensitivity to different specifications: Probability of Being Part of Escuelas Disfrutables Program**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Conventional	-0.433**	-0.436**	-0.412**	-0.421**	-0.385	-0.435**	-0.370*
	(0.184)	(0.182)	(0.200)	(0.198)	(0.248)	(0.180)	(0.202)
	[-0.793,-0.073]	[-0.793,-0.078]	[-0.803,-0.020]	[-0.810,-0.033]	[-0.871,0.100]	[-0.787,-0.083]	[-0.766,0.026]
Bias-corrected	-0.494***	-0.451**	-0.456**	-0.433**	-0.372	-0.488***	-0.452**
	(0.184)	(0.182)	(0.200)	(0.198)	(0.248)	(0.180)	(0.202)
	[-0.854,-0.134]	[-0.808,-0.094]	[-0.848,-0.064]	[-0.822,-0.045]	[-0.857,0.114]	[-0.841,-0.136]	[-0.848,-0.056]
Robust	-0.494**	-0.451**	-0.456**	-0.433**	-0.372	-0.488**	-0.452*
	(0.216)	(0.209)	(0.231)	(0.221)	(0.293)	(0.207)	(0.245)
	[-0.918,-0.069]	[-0.861,-0.042]	[-0.909,-0.002]	[-0.866,-0.001]	[-0.946,0.203]	[-0.895,-0.082]	[-0.932,0.028]
Controls:							
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Kernel	Triangular	Triangular	Triangular	Triangular	Triangular	Epanechnikov	Uniform
Bandwidth Selection	MSE-optimal	MSE two	CER-optimal	CER two	MSE-optimal	MSE-optimal	MSE-optimal
Order Loc. Poly. (p)	1	1	1	1	2	1	1
Mean Dep. Var.	0.703	0.703	0.652	0.667	0.676	0.710	0.683
SD Dep. Var.	0.460	0.460	0.482	0.476	0.471	0.457	0.471
Observations	158	158	158	158	158	158	158
Eff. Obs. at the Left ; Right	32 ; 32	32 ; 32	18 ; 28	20 ; 28	37 ; 37	34 ; 35	15 ; 26
Eff. Schools at the Left ; Right	29 ; 27	29 ; 27	17 ; 25	19 ; 25	34 ; 32	31 ; 30	14 ; 23

Notes: The Table reports the RD specification estimates associating Probability of Being Part of Escuelas Disfrutables Program with the ICSC index. The table reports three different estimates for each estimation: Conventional, Bias-Corrected, and Robust-Bias-Corrected. According to Cattaneo et al. (2020), the estimate considered is the Conventional, while the Confidence Interval and p-value of the Robust-Bias-Corrected estimate are taken into account for inference; see text for details. In all specifications, the dependent variable is Probability of Being Part of Escuelas Disfrutables Program obtained by INEEd in 2017 and 2020 from principals of schools. The ICSC index measures the vulnerability of the area where the school is located according to socio-economic indicators; see text for details. It is rescaled in such a way that a school is eligible to be APRENDER if its index is higher than zero; otherwise, it should be UC. Each (1)-(7) column specifies different model specifications detailed in them. (2)-(4) include different bandwidth selection methods, (5) includes different order of the Local Polynomial, (6)-(7) include different kernel functions. All specifications have a sharp RD design due to perfect compliance. Year and region fixed effects are implemented in every specification. Clusters at the school level are taken in every specification. Kernel indicates how the observations are weighted. Bandwidth Selection indicates the criteria used to choose bandwidth. Order Loc. Poly. (p) indicates the order of the local polynomial used for the estimation. The mean and standard deviation of the dependent variable are measured inside the bandwidth used for the estimation. Effective observations are those that are taken into account in local estimations. Standard errors in parenthesis. Confidence Intervals in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Table 66: **Sensitivity to observations near the cutoff: Probability of Having Monthly Parent Meetings**

	(1) 0	(2) 0.01	(3) 0.02	(4) 0.03
Conventional	0.512**	0.372*	0.246	0.233
	(0.204)	(0.201)	(0.229)	(0.266)
	[0.113,0.912]	[-0.022,0.767]	[-0.202,0.694]	[-0.288,0.753]
Bias-corrected	0.525**	0.361*	0.213	0.194
	(0.204)	(0.201)	(0.229)	(0.266)
	[0.125,0.924]	[-0.033,0.756]	[-0.235,0.661]	[-0.327,0.715]
Robust	0.525**	0.361	0.213	0.194
	(0.243)	(0.242)	(0.277)	(0.326)
	[0.048,1.002]	[-0.113,0.835]	[-0.331,0.757]	[-0.446,0.834]
Controls:				
Year FE	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes
Kernel	Triangular	Triangular	Triangular	Triangular
Bandwidth Selection	MSE-optimal	MSE-optimal	MSE-optimal	MSE-optimal
Order Loc. Poly. (p)	1	1	1	1
Mean Dep. Var.	0.265	0.269	0.240	0.245
SD Dep. Var.	0.446	0.448	0.431	0.434
Observations	158	157	155	154
Eff. Obs. at the Left ; Right	21 ; 28	23 ; 29	23 ; 27	22 ; 27
Eff. Schools at the Left ; Right	20 ; 25	22 ; 25	22 ; 23	21 ; 23

Notes: The Table reports the RD specification estimates associating whether school has monthly meetings with parents with the ICSC index. The table reports three different estimates for each estimation: Conventional, Bias-Corrected, and Robust-Bias-Corrected. According to Cattaneo et al. (2020), the estimate considered is the Conventional, while the Confidence Interval and p-value of the Robust-Bias-Corrected estimate are taken into account for inference; see text for details. In all specifications, the dependent variable is whether school has monthly meetings with parents using data from Aristas. The ICSC index measures the vulnerability of the area where the school is located according to socio-economic indicators; see text for details. It is rescaled in such a way that a school is eligible to be APRENDER if its index is higher than zero; otherwise, it should be UC. Each (1)-(4) column specifies the same model for different ranges of observations near the cutoff excluded. The range excluded on each side of the cutoff is detailed in them. Years included in all specifications are 2017 and 2020. All specifications have a sharp RD design due to perfect compliance. Year and region fixed effects are implemented in every specification. Clusters at the school level are taken in every specification. Kernel indicates how the observations are weighted. Bandwidth Selection indicates the criteria used to choose bandwidth. Order Loc. Poly. (p) indicates the order of the local polynomial used for the estimation. The mean and standard deviation of the dependent variable are measured inside the bandwidth used for the estimation. Effective observations are those that are taken into account in local estimations. Standard errors in parenthesis. Confidence Intervals in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Table 67: **Sensitivity to different specifications: Probability of Having Monthly Parent Meetings**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Conventional	0.512**	0.588***	0.597***	0.654***	0.498**	0.492**	0.416**
	(0.204)	(0.198)	(0.211)	(0.213)	(0.238)	(0.209)	(0.190)
	[0.113,0.912]	[0.201,0.975]	[0.183,1.011]	[0.236,1.072]	[0.031,0.964]	[0.083,0.902]	[0.043,0.789]
Bias-corrected	0.525**	0.600***	0.605***	0.665***	0.492**	0.493**	0.453**
	(0.204)	(0.198)	(0.211)	(0.213)	(0.238)	(0.209)	(0.190)
	[0.125,0.924]	[0.213,0.987]	[0.191,1.019]	[0.247,1.083]	[0.025,0.959]	[0.083,0.903]	[0.080,0.826]
Robust	0.525**	0.600**	0.605**	0.665***	0.492*	0.493*	0.453**
	(0.243)	(0.235)	(0.239)	(0.238)	(0.269)	(0.252)	(0.226)
	[0.048,1.002]	[0.140,1.060]	[0.137,1.073]	[0.198,1.132]	[-0.035,1.019]	[-0.001,0.987]	[0.009,0.896]
Controls:							
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Kernel	Triangular	Triangular	Triangular	Triangular	Triangular	Epanechnikov	Uniform
Bandwidth Selection	MSE-optimal	MSE two	CER-optimal	CER two	MSE-optimal	MSE-optimal	MSE-optimal
Order Loc. Poly. (p)	1	1	1	1	2	1	1
Mean Dep. Var.	0.265	0.271	0.316	0.303	0.267	0.271	0.266
SD Dep. Var.	0.446	0.449	0.471	0.467	0.445	0.449	0.445
Observations	158	158	158	158	158	158	158
Eff. Obs. at the Left ; Right	21 ; 28	20 ; 26	14 ; 24	10 ; 23	47 ; 54	20 ; 28	32 ; 32
Eff. Schools at the Left ; Right	20 ; 25	19 ; 25	13 ; 21	10 ; 20	44 ; 45	19 ; 25	29 ; 27

Notes: The Table reports the RD specification estimates associating Probability of Having Monthly Parent Meetings with the ICSC index. The table reports three different estimates for each estimation: Conventional, Bias-Corrected, and Robust-Bias-Corrected. According to Cattaneo et al. (2020), the estimate considered is the Conventional, while the Confidence Interval and p-value of the Robust-Bias-Corrected estimate are taken into account for inference; see text for details. In all specifications, the dependent variable is Probability of Having Monthly Parent Meetings obtained by INEEd in 2017 and 2020 from principals of schools. The ICSC index measures the vulnerability of the area where the school is located according to socio-economic indicators; see text for details. It is rescaled in such a way that a school is eligible to be APRENDER if its index is higher than zero; otherwise, it should be UC. Each (1)-(7) column specifies different model specifications detailed in them. (2)-(4) include different bandwidth selection methods, (5) includes different order of the Local Polynomial, (6)-(7) include different kernel functions. All specifications have a sharp RD design due to perfect compliance. Year and region fixed effects are implemented in every specification. Clusters at the school level are taken in every specification. Kernel indicates how the observations are weighted. Bandwidth Selection indicates the criteria used to choose bandwidth. Order Loc. Poly. (p) indicates the order of the local polynomial used for the estimation. The mean and standard deviation of the dependent variable are measured inside the bandwidth used for the estimation. Effective observations are those that are taken into account in local estimations. Standard errors in parenthesis. Confidence Intervals in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Table 68: **Sensitivity to observations near the cutoff: Teacher Expectation Index of the Relationship between Teachers**

	(1) 0	(2) 0.01	(3) 0.02	(4) 0.03
Conventional	-0.755*	-0.935**	-1.046**	-0.397
	(0.398)	(0.413)	(0.417)	(0.344)
	[-1.536,0.025]	[-1.745,-0.126]	[-1.863,-0.228]	[-1.071,0.277]
Bias-corrected	-0.822**	-1.034**	-1.152***	-0.476
	(0.398)	(0.413)	(0.417)	(0.344)
	[-1.602,-0.042]	[-1.844,-0.225]	[-1.970,-0.334]	[-1.150,0.198]
Robust	-0.822*	-1.034**	-1.152**	-0.476
	(0.449)	(0.469)	(0.502)	(0.406)
	[-1.701,0.057]	[-1.954,-0.114]	[-2.136,-0.169]	[-1.271,0.320]
Controls:				
Grade FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes
Kernel	Triangular	Triangular	Triangular	Triangular
Bandwidth Selection	MSE-optimal	MSE-optimal	MSE-optimal	MSE-optimal
Order Loc. Poly. (p)	1	1	1	1
Mean Dep. Var.	0.041	0.030	0.041	0.058
SD Dep. Var.	0.963	0.962	0.961	0.964
Observations	433	432	426	422
Eff. Obs. at the Left ; Right	41 ; 76	41 ; 75	41 ; 69	42 ; 75
Eff. Schools at the Left ; Right	19 ; 27	19 ; 26	19 ; 24	21 ; 25

Notes: The Table reports the RD specification estimates associating teachers' belief index of the Relationship between Teachers with the ICSC index. The table reports three different estimates for each estimation: Conventional, Bias-Corrected, and Robust-Bias-Corrected. According to Cattaneo et al. (2020), the estimate considered is the Conventional, while the Confidence Interval and p-value of the Robust-Bias-Corrected estimate are taken into account for inference; see text for details. In all specifications, the dependent variable is the teachers' belief standarized index of the relationship between teachers in the school using data from Aristas. The ICSC index measures the vulnerability of the area where the school is located according to socio-economic indicators; see text for details. It is rescaled in such a way that a school is eligible to be APRENDER if its index is higher than zero; otherwise, it should be UC. Each (1)-(4) column specifies the same model for different ranges of observations near the cutoff excluded. The range excluded on each side of the cutoff is detailed in them. Years included in all specifications are 2017 and 2020. All specifications have a sharp RD design due to perfect compliance. Grade, year and region fixed effects are implemented in every specification. Clusters at the school level are taken in every specification. Kernel indicates how the observations are weighted. Bandwidth Selection indicates the criteria used to choose bandwidth. Order Loc. Poly. (p) indicates the order of the local polynomial used for the estimation. The mean and standard deviation of the dependent variable are measured inside the bandwidth used for the estimation. Effective observations are those that are taken into account in local estimations. Standard errors in parenthesis. Confidence Intervals in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Table 69: **Sensitivity to different specifications: Teacher Expectation Index of the Relationship between Teachers**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Conventional	-0.755*	-0.815**	-1.030***	-1.120***	-0.863*	-0.809**	-0.789*
	(0.398)	(0.394)	(0.373)	(0.338)	(0.466)	(0.412)	(0.433)
	[-1.536,0.025]	[-1.587,-0.043]	[-1.760,-0.299]	[-1.784,-0.457]	[-1.775,0.050]	[-1.616,-0.001]	[-1.638,0.061]
Bias-corrected	-0.822**	-0.937**	-1.066***	-1.185***	-0.975**	-0.862**	-0.908**
	(0.398)	(0.394)	(0.373)	(0.338)	(0.466)	(0.412)	(0.433)
	[-1.602,-0.042]	[-1.709,-0.165]	[-1.797,-0.335]	[-1.848,-0.522]	[-1.888,-0.062]	[-1.670,-0.055]	[-1.757,-0.059]
Robust	-0.822*	-0.937**	-1.066**	-1.185***	-0.975*	-0.862*	-0.908*
	(0.449)	(0.439)	(0.461)	(0.442)	(0.506)	(0.467)	(0.473)
	[-1.701,0.057]	[-1.797,-0.076]	[-1.970,-0.161]	[-2.052,-0.318]	[-1.968,0.017]	[-1.778,0.053]	[-1.835,0.019]
Controls:							
Grade FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Kernel	Triangular	Triangular	Triangular	Triangular	Triangular	Epanechnikov	Uniform
Bandwidth Selection	MSE-optimal	MSE two	CER-optimal	CER two	MSE-optimal	MSE-optimal	MSE-optimal
Order Loc. Poly. (p)	1	1	1	1	2	1	1
Mean Dep. Var.	0.041	0.036	-0.020	-0.020	0.053	0.080	0.074
SD Dep. Var.	0.963	0.963	0.967	0.967	0.991	0.947	0.961
Observations	433	433	433	433	433	433	433
Eff. Obs. at the Left ; Right	41 ; 76	35 ; 89	21 ; 64	21 ; 76	80 ; 97	35 ; 70	48 ; 82
Eff. Schools at the Left ; Right	19 ; 27	17 ; 27	10 ; 22	10 ; 22	33 ; 32	17 ; 25	23 ; 28

Notes: The Table reports the RD specification estimates associating Teacher Expectation Index of the Relationship between Teachers with the ICSC index. The table reports three different estimates for each estimation: Conventional, Bias-Corrected, and Robust-Bias-Corrected. According to Cattaneo et al. (2020), the estimate considered is the Conventional, while the Confidence Interval and p-value of the Robust-Bias-Corrected estimate are taken into account for inference; see text for details. In all specifications, the dependent variable is Teacher Expectation Index of the Relationship between Teachers obtained by INEEd in 2017 and 2020 from teachers of third and sixth graders. The ICSC index measures the vulnerability of the area where the school is located according to socio-economic indicators; see text for details. It is rescaled in such a way that a school is eligible to be APRENDER if its index is higher than zero; otherwise, it should be UC. Each (1)-(7) column specifies different model specifications detailed in them. (2)-(4) include different bandwidth selection methods, (5) includes different order of the Local Polynomial, (6)-(7) include different kernel functions. All specifications have a sharp RD design due to perfect compliance. Grade, year and region fixed effects are implemented in every specification. Clusters at the school level are taken in every specification. Kernel indicates how the observations are weighted. Bandwidth Selection indicates the criteria used to choose bandwidth. Order Loc. Poly. (p) indicates the order of the local polynomial used for the estimation. The mean and standard deviation of the dependent variable are measured inside the bandwidth used for the estimation. Effective observations are those that are taken into account in local estimations. Standard errors in parenthesis. Confidence Intervals in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Table 70: **Sensitivity to observations near the cutoff: Probability that Teacher took a recent course in math to be up-to-date**

	(1) 0	(2) 0.01	(3) 0.02	(4) 0.03
Conventional	0.983***	0.983***	0.494	0.395
	(0.225)	(0.225)	(0.311)	(0.347)
	[0.542,1.424]	[0.542,1.424]	[-0.115,1.103]	[-0.285,1.074]
Bias-corrected	1.122***	1.122***	0.533*	0.426
	(0.225)	(0.225)	(0.311)	(0.347)
	[0.681,1.563]	[0.681,1.563]	[-0.076,1.142]	[-0.253,1.105]
Robust	1.122***	1.122***	0.533	0.426
	(0.239)	(0.239)	(0.378)	(0.432)
	[0.654,1.591]	[0.654,1.591]	[-0.209,1.274]	[-0.421,1.273]
Controls:				
Grade FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes
Kernel	Triangular	Triangular	Triangular	Triangular
Bandwidth Selection	MSE-optimal	MSE-optimal	MSE-optimal	MSE-optimal
Order Loc. Poly. (p)	1	1	1	1
Mean Dep. Var.	0.391	0.384	0.329	0.364
SD Dep. Var.	0.491	0.489	0.471	0.483
Observations	258	258	256	253
Eff. Obs. at the Left ; Right	16 ; 40	16 ; 40	48 ; 55	29 ; 50
Eff. Schools at the Left ; Right	11 ; 22	11 ; 21	30 ; 25	21 ; 24

Notes: The Table reports the RD specification estimates associating if teacher took a recent math course to be up-to-date with the ICSC index. The table reports three different estimates for each estimation: Conventional, Bias-Corrected, and Robust-Bias-Corrected. According to Cattaneo et al. (2020), the estimate considered is the Conventional, while the Confidence Interval and p-value of the Robust-Bias-Corrected estimate are taken into account for inference; see text for details. In all specifications, the dependent variable is if teacher took a recent math course to be up-to-date using data from Aristas. The ICSC index measures the vulnerability of the area where the school is located according to socio-economic indicators; see text for details. It is rescaled in such a way that a school is eligible to be APRENDER if its index is higher than zero; otherwise, it should be UC. Each (1)-(4) column specifies the same model for different ranges of observations near the cutoff excluded. The range excluded on each side of the cutoff is detailed in them. Years included in all specifications are 2017 and 2020. All specifications have a sharp RD design due to perfect compliance. Grade, year and region fixed effects are implemented in every specification. Clusters at the school level are taken in every specification. Kernel indicates how the observations are weighted. Bandwidth Selection indicates the criteria used to choose bandwidth. Order Loc. Poly. (p) indicates the order of the local polynomial used for the estimation. The mean and standard deviation of the dependent variable are measured inside the bandwidth used for the estimation. Effective observations are those that are taken into account in local estimations. Standard errors in parenthesis. Confidence Intervals in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Table 71: **Sensitivity to different specifications: Probability that Teacher took a recent course in math to be up-to-date**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Conventional	0.983***	0.959***	1.172***	1.070***	1.275***	0.935***	0.884***
	(0.225)	(0.238)	(0.138)	(0.176)	(0.178)	(0.258)	(0.309)
	[0.542,1.424]	[0.493,1.425]	[0.903,1.442]	[0.725,1.416]	[0.927,1.623]	[0.430,1.440]	[0.278,1.490]
Bias-corrected	1.122***	1.134***	1.241***	1.177***	1.418***	1.071***	0.999***
	(0.225)	(0.238)	(0.138)	(0.176)	(0.178)	(0.258)	(0.309)
	[0.681,1.563]	[0.668,1.600]	[0.972,1.511]	[0.831,1.523]	[1.070,1.766]	[0.566,1.576]	[0.393,1.605]
Robust	1.122***	1.134***	1.241***	1.177***	1.418***	1.071***	0.999***
	(0.239)	(0.235)	(0.227)	(0.194)	(0.178)	(0.285)	(0.357)
	[0.654,1.591]	[0.675,1.594]	[0.797,1.685]	[0.797,1.557]	[1.069,1.767]	[0.513,1.630]	[0.300,1.699]
Controls:							
Grade FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Kernel	Triangular	Triangular	Triangular	Triangular	Triangular	Epanechnikov	Uniform
Bandwidth Selection	MSE-optimal	MSE two	CER-optimal	CER two	MSE-optimal	MSE-optimal	MSE-optimal
Order Loc. Poly. (p)	1	1	1	1	2	1	1
Mean Dep. Var.	0.391	0.378	0.356	0.395	0.347	0.388	0.388
SD Dep. Var.	0.491	0.487	0.483	0.492	0.478	0.490	0.490
Observations	258	258	258	258	258	258	258
Eff. Obs. at the Left ; Right	16 ; 40	20 ; 43	12 ; 25	12 ; 40	43 ; 57	15 ; 40	15 ; 40
Eff. Schools at the Left ; Right	11 ; 22	13 ; 24	8 ; 16	8 ; 21	26 ; 28	10 ; 22	10 ; 22

Notes: The Table reports the RD specification estimates associating Probability that Teacher took a recent course in math to be up-to-date with the ICSC index. The table reports three different estimates for each estimation: Conventional, Bias-Corrected, and Robust-Bias-Corrected. According to Cattaneo et al. (2020), the estimate considered is the Conventional, while the Confidence Interval and p-value of the Robust-Bias-Corrected estimate are taken into account for inference; see text for details. In all specifications, the dependent variable is Probability that Teacher took a recent course in math to be up-to-date obtained by INEEd in 2017 and 2020 from teachers of third and sixth graders. The ICSC index measures the vulnerability of the area where the school is located according to socio-economic indicators; see text for details. It is rescaled in such a way that a school is eligible to be APRENDER if its index is higher than zero; otherwise, it should be UC. Each (1)-(7) column specifies different model specifications detailed in them. (2)-(4) include different bandwidth selection methods, (5) includes different order of the Local Polynomial, (6)-(7) include different kernel functions. All specifications have a sharp RD design due to perfect compliance. Grade, year and region fixed effects are implemented in every specification. Clusters at the school level are taken in every specification. Kernel indicates how the observations are weighted. Bandwidth Selection indicates the criteria used to choose bandwidth. Order Loc. Poly. (p) indicates the order of the local polynomial used for the estimation. The mean and standard deviation of the dependent variable are measured inside the bandwidth used for the estimation. Effective observations are those that are taken into account in local estimations. Standard errors in parenthesis. Confidence Intervals in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Table 72: **Sensitivity to observations near the cutoff: Probability that Teacher took a recent course in language to be up-to-date**

	(1) 0	(2) 0.01	(3) 0.02	(4) 0.03
Conventional	0.466*	0.466*	0.108	-0.135
	(0.248)	(0.248)	(0.231)	(0.285)
	[-0.020,0.952]	[-0.020,0.952]	[-0.344,0.561]	[-0.695,0.424]
Bias-corrected	0.525**	0.525**	0.073	-0.206
	(0.248)	(0.248)	(0.231)	(0.285)
	[0.039,1.010]	[0.039,1.010]	[-0.379,0.526]	[-0.766,0.353]
Robust	0.525*	0.525*	0.073	-0.206
	(0.273)	(0.273)	(0.283)	(0.352)
	[-0.010,1.060]	[-0.010,1.060]	[-0.481,0.628]	[-0.896,0.483]
Controls:				
Grade FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes
Kernel	Triangular	Triangular	Triangular	Triangular
Bandwidth Selection	MSE-optimal	MSE-optimal	MSE-optimal	MSE-optimal
Order Loc. Poly. (p)	1	1	1	1
Mean Dep. Var.	0.361	0.364	0.349	0.402
SD Dep. Var.	0.483	0.484	0.478	0.492
Observations	258	258	256	253
Eff. Obs. at the Left ; Right	24 ; 45	24 ; 45	48 ; 55	27 ; 46
Eff. Schools at the Left ; Right	17 ; 25	17 ; 24	30 ; 25	20 ; 23

Notes: The Table reports the RD specification estimates associating if teacher took a recent language course to be up-to-date with the ICSC index. The table reports three different estimates for each estimation: Conventional, Bias-Corrected, and Robust-Bias-Corrected. According to Cattaneo et al. (2020), the estimate considered is the Conventional, while the Confidence Interval and p-value of the Robust-Bias-Corrected estimate are taken into account for inference; see text for details. In all specifications, the dependent variable is if teacher took a recent language course to be up-to-date using data from Aristas. The ICSC index measures the vulnerability of the area where the school is located according to socio-economic indicators; see text for details. It is rescaled in such a way that a school is eligible to be APRENDER if its index is higher than zero; otherwise, it should be UC. Each (1)-(4) column specifies the same model for different ranges of observations near the cutoff excluded. The range excluded on each side of the cutoff is detailed in them. Years included in all specifications are 2017 and 2020. All specifications have a sharp RD design due to perfect compliance. Grade, year and region fixed effects are implemented in every specification. Clusters at the school level are taken in every specification. Kernel indicates how the observations are weighted. Bandwidth Selection indicates the criteria used to choose bandwidth. Order Loc. Poly. (p) indicates the order of the local polynomial used for the estimation. The mean and standard deviation of the dependent variable are measured inside the bandwidth used for the estimation. Effective observations are those that are taken into account in local estimations. Standard errors in parenthesis. Confidence Intervals in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Table 73: **Sensitivity to different specifications: Probability that Teacher took a recent course in language to be up-to-date**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Conventional	0.466*	0.564**	0.673***	0.848***	0.947***	0.422	0.343
	(0.248)	(0.221)	(0.211)	(0.162)	(0.227)	(0.261)	(0.280)
	[-0.020,0.952]	[0.131,0.997]	[0.260,1.086]	[0.529,1.166]	[0.502,1.391]	[-0.091,0.934]	[-0.206,0.891]
Bias-corrected	0.525**	0.602***	0.705***	0.859***	1.081***	0.473*	0.419
	(0.248)	(0.221)	(0.211)	(0.162)	(0.227)	(0.261)	(0.280)
	[0.039,1.010]	[0.169,1.035]	[0.292,1.118]	[0.541,1.177]	[0.637,1.525]	[-0.039,0.986]	[-0.129,0.968]
Robust	0.525*	0.602**	0.705***	0.859***	1.081***	0.473	0.419
	(0.273)	(0.260)	(0.268)	(0.269)	(0.232)	(0.295)	(0.304)
	[-0.010,1.060]	[0.092,1.112]	[0.179,1.230]	[0.331,1.387]	[0.627,1.535]	[-0.105,1.051]	[-0.177,1.016]
Controls:							
Grade FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Kernel	Triangular	Triangular	Triangular	Triangular	Triangular	Epanechnikov	Uniform
Bandwidth Selection	MSE-optimal	MSE two	CER-optimal	CER two	MSE-optimal	MSE-optimal	MSE-optimal
Order Loc. Poly. (p)	1	1	1	1	2	1	1
Mean Dep. Var.	0.361	0.376	0.412	0.351	0.370	0.367	0.371
SD Dep. Var.	0.483	0.486	0.495	0.479	0.485	0.485	0.486
Observations	258	258	258	258	258	258	258
Eff. Obs. at the Left ; Right	24 ; 45	56 ; 40	15 ; 40	48 ; 25	36 ; 52	20 ; 43	23 ; 43
Eff. Schools at the Left ; Right	17 ; 25	36 ; 36	10 ; 22	30 ; 28	24 ; 27	13 ; 24	16 ; 24

Notes: The Table reports the RD specification estimates associating Probability that Teacher took a recent course in language to be up-to-date with the ICSC index. The table reports three different estimates for each estimation: Conventional, Bias-Corrected, and Robust-Bias-Corrected. According to Cattaneo et al. (2020), the estimate considered is the Conventional, while the Confidence Interval and p-value of the Robust-Bias-Corrected estimate are taken into account for inference; see text for details. In all specifications, the dependent variable is Probability that Teacher took a recent course in language to be up-to-date obtained by INEEd in 2017 and 2020 from teachers of third and sixth graders. The ICSC index measures the vulnerability of the area where the school is located according to socio-economic indicators; see text for details. It is rescaled in such a way that a school is eligible to be APRENDER if its index is higher than zero; otherwise, it should be UC. Each (1)-(7) column specifies different model specifications detailed in them. (2)-(4) include different bandwidth selection methods, (5) includes different order of the Local Polynomial, (6)-(7) include different kernel functions. All specifications have a sharp RD design due to perfect compliance. Grade, year and region fixed effects are implemented in every specification. Clusters at the school level are taken in every specification. Kernel indicates how the observations are weighted. Bandwidth Selection indicates the criteria used to choose bandwidth. Order Loc. Poly. (p) indicates the order of the local polynomial used for the estimation. The mean and standard deviation of the dependent variable are measured inside the bandwidth used for the estimation. Effective observations are those that are taken into account in local estimations. Standard errors in parenthesis. Confidence Intervals in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Table 74: **Sensitivity to observations near the cutoff: Probability that Teacher Sends Math Homework**

	(1)	(2)	(3)	(4)
	0	0.01	0.02	0.03
Conventional	-0.220***	-0.253***	-0.090	-0.145
	(0.084)	(0.081)	(0.115)	(0.116)
	[-0.383,-0.056]	[-0.412,-0.094]	[-0.315,0.136]	[-0.372,0.082]
Bias-corrected	-0.244***	-0.288***	-0.116	-0.166
	(0.084)	(0.081)	(0.115)	(0.116)
	[-0.408,-0.080]	[-0.446,-0.129]	[-0.341,0.110]	[-0.393,0.062]
Robust	-0.244***	-0.288***	-0.116	-0.166
	(0.094)	(0.089)	(0.136)	(0.138)
	[-0.428,-0.060]	[-0.463,-0.112]	[-0.383,0.152]	[-0.436,0.105]
Controls:				
Grade FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes
Kernel	Triangular	Triangular	Triangular	Triangular
Bandwidth Selection	MSE-optimal	MSE-optimal	MSE-optimal	MSE-optimal
Order Loc. Poly. (p)	1	1	1	1
Mean Dep. Var.	0.907	0.906	0.933	0.915
SD Dep. Var.	0.292	0.294	0.251	0.279
Observations	291	290	284	282
Eff. Obs. at the Left ; Right	23 ; 54	23 ; 53	46 ; 55	25 ; 50
Eff. Schools at the Left ; Right	20 ; 27	19 ; 26	30 ; 26	22 ; 25

Notes: The Table reports the RD specification estimates associating if the teacher sends math homework with the ICSC index. The table reports three different estimates for each estimation: Conventional, Bias-Corrected, and Robust-Bias-Corrected. According to Cattaneo et al. (2020), the estimate considered is the Conventional, while the Confidence Interval and p-value of the Robust-Bias-Corrected estimate are taken into account for inference; see text for details. In all specifications, the dependent variable is if the teacher sends math homework using data from Aristas. The ICSC index measures the vulnerability of the area where the school is located according to socio-economic indicators; see text for details. It is rescaled in such a way that a school is eligible to be APRENDER if its index is higher than zero; otherwise, it should be UC. Each (1)-(4) column specifies the same model for different ranges of observations near the cutoff excluded. The range excluded on each side of the cutoff is detailed in them. Years included in all specifications are 2017 and 2020. All specifications have a sharp RD design due to perfect compliance. Grade, year and region fixed effects are implemented in every specification. Clusters at the school level are taken in every specification. Kernel indicates how the observations are weighted. Bandwidth Selection indicates the criteria used to choose bandwidth. Order Loc. Poly. (p) indicates the order of the local polynomial used for the estimation. The mean and standard deviation of the dependent variable are measured inside the bandwidth used for the estimation. Effective observations are those that are taken into account in local estimations. Standard errors in parenthesis. Confidence Intervals in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Table 75: **Sensitivity to different specifications: Probability that Teacher Sends Math Homework at group level**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Conventional	-0.220***	-0.197**	-0.259***	-0.224***	-0.233***	-0.218**	-0.179*
	(0.084)	(0.085)	(0.076)	(0.080)	(0.082)	(0.085)	(0.097)
	[-0.383,-0.056]	[-0.363,-0.031]	[-0.409,-0.109]	[-0.380,-0.067]	[-0.394,-0.073]	[-0.385,-0.051]	[-0.369,0.012]
Bias-corrected	-0.244***	-0.223***	-0.279***	-0.244***	-0.249***	-0.244***	-0.190*
	(0.084)	(0.085)	(0.076)	(0.080)	(0.082)	(0.085)	(0.097)
	[-0.408,-0.080]	[-0.390,-0.057]	[-0.429,-0.129]	[-0.401,-0.088]	[-0.410,-0.089]	[-0.411,-0.077]	[-0.380,0.001]
Robust	-0.244***	-0.223**	-0.279***	-0.244***	-0.249***	-0.244**	-0.190*
	(0.094)	(0.090)	(0.090)	(0.088)	(0.086)	(0.098)	(0.109)
	[-0.428,-0.060]	[-0.399,-0.048]	[-0.456,-0.102]	[-0.416,-0.072]	[-0.417,-0.081]	[-0.435,-0.053]	[-0.403,0.024]
Controls:							
Grade FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Kernel	Triangular	Triangular	Triangular	Triangular	Triangular	Epanechnikov	Uniform
Bandwidth Selection	MSE-optimal	MSE two	CER-optimal	CER two	MSE-optimal	MSE-optimal	MSE-optimal
Order Loc. Poly. (p)	1	1	1	1	2	1	1
Mean Dep. Var.	0.907	0.913	0.921	0.916	0.936	0.906	0.902
SD Dep. Var.	0.292	0.283	0.271	0.279	0.246	0.293	0.299
Observations	291	291	291	291	291	291	291
Eff. Obs. at the Left ; Right	23 ; 54	25 ; 62	15 ; 47	16 ; 54	73 ; 115	23 ; 54	21 ; 52
Eff. Schools at the Left ; Right	20 ; 27	22 ; 28	12 ; 23	13 ; 24	47 ; 47	19 ; 27	17 ; 26

Notes: The Table reports the RD specification estimates associating Probability that Teacher Sends Math Homework with the ICSC index. For each estimation, table reports three different estimates: Conventional, Bias-Corrected and Robust-Bias-Corrected. According to Cattaneo et al. (2020), the estimate considered is the Conventional, while the Confidence Interval and p-value of the Robust-Bias-Corrected estimate are taken into account for inference; see text for details. In all specifications, the dependent variable is Probability that Teacher Sends Math Homework obtained by INEEd in 2017 and 2020 from teachers of third and sixth graders. The ICSC index measures the vulnerability of the area where the school is located according to socio-economic indicators; see text for details. It is rescaled in such way that a school is eligible to be APRENDER if its index is higher than zero; otherwise it should be UC. Each (1)-(7) column specifies different model specifications detailed in them. (2)-(4) include different bandwidth selection methods, (5) includes different order of the Local Polynomial, (6)-(7) include different kernel functions. All specifications have a sharp RD design due to perfect compliance. Grade, year and region fixed effects are implemented in every specification. Clusters at school level are taken in every specification. Kernel indicates how the observations are weighted. Bandwidth Selection indicates the criteria used to choose bandwidth. Order Loc. Poly. (p) indicates the order of the local polynomial used for the estimation. Mean and standard deviation of dependent variable are measured inside the bandwidth used for the estimation. Effective observations are those that are taken into account in local estimations. Standard errors in parenthesis. Confidence Intervals in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Table 76: **Sensitivity to observations near the cutoff: Probability that Teacher Sends Language Homework**

	(1)	(2)	(3)	(4)
	0	0.01	0.02	0.03
Conventional	-0.188**	-0.197**	-0.183	-0.230*
	(0.090)	(0.095)	(0.130)	(0.127)
	[-0.365,-0.011]	[-0.382,-0.012]	[-0.438,0.071]	[-0.480,0.020]
Bias-corrected	-0.207**	-0.219**	-0.206	-0.259**
	(0.090)	(0.095)	(0.130)	(0.127)
	[-0.383,-0.030]	[-0.405,-0.034]	[-0.461,0.048]	[-0.508,-0.009]
Robust	-0.207**	-0.219**	-0.206	-0.259*
	(0.103)	(0.109)	(0.155)	(0.153)
	[-0.408,-0.006]	[-0.432,-0.006]	[-0.510,0.097]	[-0.557,0.040]
Controls:				
Grade FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes
Kernel	Triangular	Triangular	Triangular	Triangular
Bandwidth Selection	MSE-optimal	MSE-optimal	MSE-optimal	MSE-optimal
Order Loc. Poly. (p)	1	1	1	1
Mean Dep. Var.	0.899	0.899	0.898	0.896
SD Dep. Var.	0.302	0.302	0.304	0.306
Observations	293	292	286	284
Eff. Obs. at the Left ; Right	49 ; 65	49 ; 64	30 ; 51	28 ; 51
Eff. Schools at the Left ; Right	31 ; 30	31 ; 29	24 ; 25	23 ; 25

Notes: The Table reports the RD specification estimates associating if the teacher sends language homework with the ICSC index. The table reports three different estimates for each estimation: Conventional, Bias-Corrected, and Robust-Bias-Corrected. According to Cattaneo et al. (2020), the estimate considered is the Conventional, while the Confidence Interval and p-value of the Robust-Bias-Corrected estimate are taken into account for inference; see text for details. In all specifications, the dependent variable is if the teacher sends language homework using data from Aristas. The ICSC index measures the vulnerability of the area where the school is located according to socio-economic indicators; see text for details. It is rescaled in such a way that a school is eligible to be APRENDER if its index is higher than zero; otherwise, it should be UC. Each (1)-(4) column specifies the same model for different ranges of observations near the cutoff excluded. The range excluded on each side of the cutoff is detailed in them. Years included in all specifications are 2017 and 2020. All specifications have a sharp RD design due to perfect compliance. Grade, year and region fixed effects are implemented in every specification. Clusters at the school level are taken in every specification. Kernel indicates how the observations are weighted. Bandwidth Selection indicates the criteria used to choose bandwidth. Order Loc. Poly. (p) indicates the order of the local polynomial used for the estimation. The mean and standard deviation of the dependent variable are measured inside the bandwidth used for the estimation. Effective observations are those that are taken into account in local estimations. Standard errors in parenthesis. Confidence Intervals in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Table 77: **Sensitivity to different specifications: Probability that Teacher Sends Language Homework at group level**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Conventional	-0.188**	-0.156*	-0.208**	-0.172*	-0.210**	-0.205**	-0.195**
	(0.090)	(0.086)	(0.096)	(0.103)	(0.102)	(0.097)	(0.094)
	[-0.365,-0.011]	[-0.325,0.012]	[-0.397,-0.019]	[-0.374,0.031]	[-0.410,-0.010]	[-0.395,-0.014]	[-0.379,-0.012]
Bias-corrected	-0.207**	-0.171**	-0.219**	-0.180*	-0.213**	-0.229**	-0.222**
	(0.090)	(0.086)	(0.096)	(0.103)	(0.102)	(0.097)	(0.094)
	[-0.383,-0.030]	[-0.340,-0.003]	[-0.408,-0.030]	[-0.383,0.023]	[-0.413,-0.013]	[-0.420,-0.038]	[-0.406,-0.039]
Robust	-0.207**	-0.171*	-0.219**	-0.180	-0.213*	-0.229**	-0.222**
	(0.103)	(0.101)	(0.105)	(0.113)	(0.110)	(0.110)	(0.104)
	[-0.408,-0.006]	[-0.369,0.027]	[-0.425,-0.014]	[-0.402,0.042]	[-0.428,0.002]	[-0.444,-0.013]	[-0.427,-0.018]
Controls:							
Grade FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Kernel	Triangular	Triangular	Triangular	Triangular	Triangular	Epanechnikov	Uniform
Bandwidth Selection	MSE-optimal	MSE two	CER-optimal	CER two	MSE-optimal	MSE-optimal	MSE-optimal
Order Loc. Poly. (p)	1	1	1	1	2	1	1
Mean Dep. Var.	0.899	0.893	0.893	0.886	0.910	0.894	0.904
SD Dep. Var.	0.302	0.311	0.310	0.319	0.287	0.309	0.297
Observations	293	293	293	293	293	293	293
Eff. Obs. at the Left ; Right	49 ; 65	23 ; 88	25 ; 54	9 ; 63	62 ; 90	25 ; 54	20 ; 50
Eff. Schools at the Left ; Right	31 ; 30	17 ; 25	19 ; 27	9 ; 22	41 ; 38	20 ; 27	14 ; 25

Notes: The Table reports the RD specification estimates associating Probability that Teacher Sends Language Homework with the ICSC index. For each estimation, table reports three different estimates: Conventional, Bias-Corrected and Robust-Bias-Corrected. According to Cattaneo et al. (2020), the estimate considered is the Conventional, while the Confidence Interval and p-value of the Robust-Bias-Corrected estimate are taken into account for inference; see text for details. In all specifications, the dependent variable is Probability that Teacher Sends Language Homework obtained by INEEd in 2017 and 2020 from teachers of third and sixth graders. The ICSC index measures the vulnerability of the area where the school is located according to socio-economic indicators; see text for details. It is rescaled in such way that a school is eligible to be APRENDER if its index is higher than zero; otherwise it should be UC. Each (1)-(7) column specifies different model specifications detailed in them. (2)-(4) include different bandwidth selection methods, (5) includes different order of the Local Polynomial, (6)-(7) include different kernel functions. All specifications have a sharp RD design due to perfect compliance. Grade, year and region fixed effects are implemented in every specification. Clusters at school level are taken in every specification. Kernel indicates how the observations are weighted. Bandwidth Selection indicates the criteria used to choose bandwidth. Order Loc. Poly. (p) indicates the order of the local polynomial used for the estimation. Mean and standard deviation of dependent variable are measured inside the bandwidth used for the estimation. Effective observations are those that are taken into account in local estimations. Standard errors in parenthesis. Confidence Intervals in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Table 78: **Sensitivity to observations near the cutoff: Probability that Parents Expect Kid Finishing a Tertiary Study**

	(1) 0	(2) 0.01	(3) 0.02	(4) 0.03
Conventional	0.068*	0.070*	0.075*	0.087*
	(0.038)	(0.039)	(0.040)	(0.046)
	[-0.007,0.143]	[-0.006,0.146]	[-0.004,0.154]	[-0.004,0.177]
Bias-corrected	0.084**	0.086**	0.090**	0.106**
	(0.038)	(0.039)	(0.040)	(0.046)
	[0.009,0.159]	[0.010,0.162]	[0.011,0.169]	[0.016,0.197]
Robust	0.084*	0.086*	0.090*	0.106*
	(0.046)	(0.047)	(0.048)	(0.054)
	[-0.007,0.174]	[-0.006,0.177]	[-0.003,0.183]	[-0.000,0.213]
Controls:				
Grade FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes
Kernel	Triangular	Triangular	Triangular	Triangular
Bandwidth Selection	MSE-optimal	MSE-optimal	MSE-optimal	MSE-optimal
Order Loc. Poly. (p)	1	1	1	1
Mean Dep. Var.	0.224	0.228	0.220	0.227
SD Dep. Var.	0.417	0.420	0.415	0.419
Observations	8,070	8,046	7,945	7,910
Eff. Obs. at the Left ; Right	1626 ; 1732	1626 ; 1668	1713 ; 1687	1577 ; 1567
Eff. Schools at the Left ; Right	31 ; 30	31 ; 28	33 ; 29	29 ; 26

Notes: The Table reports the RD specification estimates associating parents' belief about their kid finishing a Tertiary Study with the ICSC index. The table reports three different estimates for each estimation: Conventional, Bias-Corrected, and Robust-Bias-Corrected. According to Cattaneo et al. (2020), the estimate considered is the Conventional, while the Confidence Interval and p-value of the Robust-Bias-Corrected estimate are taken into account for inference; see text for details. In all specifications, the dependent variable is whether parents believe their kid will a Tertiary Study using data from Aristas. The ICSC index measures the vulnerability of the area where the school is located according to socio-economic indicators; see text for details. It is rescaled in such a way that a school is eligible to be APRENDER if its index is higher than zero; otherwise, it should be UC. Each (1)-(4) column specifies the same model for different ranges of observations near the cutoff excluded. The range excluded on each side of the cutoff is detailed in them. Years included in all specifications are 2017 and 2020. All specifications have a sharp RD design due to perfect compliance. Grade, year and region fixed effects are implemented in every specification. Clusters at the school level are taken in every specification. Kernel indicates how the observations are weighted. Bandwidth Selection indicates the criteria used to choose bandwidth. Order Loc. Poly. (p) indicates the order of the local polynomial used for the estimation. The mean and standard deviation of the dependent variable are measured inside the bandwidth used for the estimation. Effective observations are those that are taken into account in local estimations. Standard errors in parenthesis. Confidence Intervals in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Table 79: **Sensitivity to different specifications: Probability that Parents Expect Kid Finishing a Tertiary Study**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Conventional	0.068*	0.069*	0.076*	0.077*	0.081	0.068*	0.070*
	(0.038)	(0.039)	(0.042)	(0.043)	(0.057)	(0.040)	(0.041)
	[-0.007,0.143]	[-0.007,0.145]	[-0.007,0.159]	[-0.007,0.161]	[-0.031,0.193]	[-0.011,0.146]	[-0.011,0.152]
Bias-corrected	0.084**	0.085**	0.087**	0.088**	0.074	0.083**	0.091**
	(0.038)	(0.039)	(0.042)	(0.043)	(0.057)	(0.040)	(0.041)
	[0.009,0.159]	[0.009,0.161]	[0.004,0.170]	[0.005,0.172]	[-0.038,0.186]	[0.004,0.161]	[0.010,0.172]
Robust	0.084*	0.085*	0.087*	0.088*	0.074	0.083*	0.091*
	(0.046)	(0.048)	(0.049)	(0.050)	(0.069)	(0.048)	(0.049)
	[-0.007,0.174]	[-0.009,0.179]	[-0.009,0.183]	[-0.010,0.187]	[-0.061,0.208]	[-0.011,0.176]	[-0.004,0.186]
Controls:							
Grade FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Kernel	Triangular	Triangular	Triangular	Triangular	Triangular	Epanechnikov	Uniform
Bandwidth Selection	MSE-optimal	MSE two	CER-optimal	CER two	MSE-optimal	MSE-optimal	MSE-optimal
Order Loc. Poly. (p)	1	1	1	1	2	1	1
Mean Dep. Var.	0.224	0.228	0.216	0.216	0.234	0.214	0.216
SD Dep. Var.	0.417	0.419	0.412	0.412	0.424	0.410	0.412
Observations	8,070	8,070	8,070	8,070	8,070	8,070	8,070
Eff. Obs. at the Left ; Right	1626 ; 1732	1612 ; 1692	1031 ; 1469	1031 ; 1469	1801 ; 1840	1225 ; 1578	1031 ; 1469
Eff. Schools at the Left ; Right	31 ; 30	30 ; 29	19 ; 27	19 ; 27	35 ; 33	24 ; 28	19 ; 27

Notes: The Table reports the RD specification estimates associating Probability that Parents Expect Kid Finishing a Tertiary Study with the ICSC index. The table reports three different estimates for each estimation: Conventional, Bias-Corrected, and Robust-Bias-Corrected. According to Cattaneo et al. (2020), the estimate considered is the Conventional, while the Confidence Interval and p-value of the Robust-Bias-Corrected estimate are taken into account for inference; see text for details. In all specifications, the dependent variable is the Probability that Parents Expect Kid Finishing a Tertiary Study conducted by INEEd in 2017 and 2020 to third and sixth graders' families. The ICSC index measures the vulnerability of the area where the school is located according to socio-economic indicators; see text for details. It is rescaled in such a way that a school is eligible to be APRENDER if its index is higher than zero; otherwise, it should be UC. Each (1)-(7) column specifies different model specifications detailed in them. (2)-(4) include different bandwidth selection methods, (5) includes different order of the Local Polynomial, (6)-(7) include different kernel functions. All specifications have a sharp RD design due to perfect compliance. Grade, year and region fixed effects are implemented in every specification. Clusters at the school level are taken in every specification. Kernel indicates how the observations are weighted. Bandwidth Selection indicates the criteria used to choose bandwidth. Order Loc. Poly. (p) indicates the order of the local polynomial used for the estimation. The mean and standard deviation of the dependent variable are measured inside the bandwidth used for the estimation. Effective observations are those that are taken into account in local estimations. Standard errors in parenthesis. Confidence Intervals in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Table 80: **Sensitivity to observations near the cutoff: Probability that Parents Expect Kid Reaches a Higher Education than them**

	(1) 0	(2) 0.01	(3) 0.02	(4) 0.03
Conventional	0.068**	0.024	0.022	0.029
	(0.030)	(0.021)	(0.026)	(0.029)
	[0.009,0.126]	[-0.017,0.064]	[-0.030,0.073]	[-0.027,0.085]
Bias-corrected	0.079***	0.029	0.015	0.028
	(0.030)	(0.021)	(0.026)	(0.029)
	[0.020,0.137]	[-0.011,0.069]	[-0.037,0.067]	[-0.028,0.084]
Robust	0.079**	0.029	0.015	0.028
	(0.037)	(0.026)	(0.032)	(0.036)
	[0.006,0.151]	[-0.023,0.081]	[-0.048,0.078]	[-0.042,0.098]
Controls:				
Grade FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes
Kernel	Triangular	Triangular	Triangular	Triangular
Bandwidth Selection	MSE-optimal	MSE-optimal	MSE-optimal	MSE-optimal
Order Loc. Poly. (p)	1	1	1	1
Mean Dep. Var.	0.772	0.773	0.770	0.773
SD Dep. Var.	0.420	0.419	0.421	0.419
Observations	8,010	7,986	7,887	7,852
Eff. Obs. at the Left ; Right	537 ; 1248	769 ; 1328	769 ; 1229	734 ; 1169
Eff. Schools at the Left ; Right	10 ; 22	13 ; 23	13 ; 21	12 ; 20

Notes: The Table reports the RD specification estimates associating parents' belief about their kid achieving a higher education level than them with the ICSC index. The table reports three different estimates for each estimation: Conventional, Bias-Corrected, and Robust-Bias-Corrected. According to Cattaneo et al. (2020), the estimate considered is the Conventional, while the Confidence Interval and p-value of the Robust-Bias-Corrected estimate are taken into account for inference; see text for details. In all specifications, the dependent variable is whether parents believe their kid will achieve a higher education level than them using data from Aristas. The ICSC index measures the vulnerability of the area where the school is located according to socio-economic indicators; see text for details. It is rescaled in such a way that a school is eligible to be APRENDER if its index is higher than zero; otherwise, it should be UC. Each (1)-(4) column specifies the same model for different ranges of observations near the cutoff excluded. The range excluded on each side of the cutoff is detailed in them. Years included in all specifications are 2017 and 2020. All specifications have a sharp RD design due to perfect compliance. Grade, year and region fixed effects are implemented in every specification. Clusters at the school level are taken in every specification. Kernel indicates how the observations are weighted. Bandwidth Selection indicates the criteria used to choose bandwidth. Order Loc. Poly. (p) indicates the order of the local polynomial used for the estimation. The mean and standard deviation of the dependent variable are measured inside the bandwidth used for the estimation. Effective observations are those that are taken into account in local estimations. Standard errors in parenthesis. Confidence Intervals in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Table 81: **Sensitivity to different specifications: Probability that Parents Expect Kid Reaches a Higher Education than them**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Conventional	0.068**	0.063**	0.081**	0.063*	0.083**	0.072**	0.036
	(0.030)	(0.031)	(0.037)	(0.033)	(0.039)	(0.032)	(0.030)
	[0.009,0.126]	[0.002,0.123]	[0.009,0.153]	[-0.003,0.128]	[0.007,0.159]	[0.008,0.135]	[-0.022,0.095]
Bias-corrected	0.079***	0.068**	0.088**	0.067**	0.087**	0.084***	0.037
	(0.030)	(0.031)	(0.037)	(0.033)	(0.039)	(0.032)	(0.030)
	[0.020,0.137]	[0.007,0.128]	[0.017,0.160]	[0.002,0.132]	[0.011,0.163]	[0.020,0.147]	[-0.021,0.095]
Robust	0.079**	0.068*	0.088**	0.067*	0.087**	0.084**	0.037
	(0.037)	(0.036)	(0.041)	(0.038)	(0.044)	(0.039)	(0.037)
	[0.006,0.151]	[-0.003,0.139]	[0.008,0.169]	[-0.007,0.141]	[0.000,0.173]	[0.007,0.161]	[-0.035,0.109]
Controls:							
Grade FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Kernel	Triangular	Triangular	Triangular	Triangular	Triangular	Epanechnikov	Uniform
Bandwidth Selection	MSE-optimal	MSE two	CER-optimal	CER two	MSE-optimal	MSE-optimal	MSE-optimal
Order Loc. Poly. (p)	1	1	1	1	2	1	1
Mean Dep. Var.	0.772	0.771	0.767	0.774	0.768	0.769	0.773
SD Dep. Var.	0.420	0.420	0.423	0.418	0.422	0.422	0.419
Observations	8,010	8,010	8,010	8,010	8,010	8,010	8,010
Eff. Obs. at the Left ; Right	537 ; 1248	442 ; 1460	442 ; 959	414 ; 1352	1176 ; 1569	484 ; 1248	769 ; 1352
Eff. Schools at the Left ; Right	10 ; 22	8 ; 18	8 ; 16	7 ; 15	23 ; 28	9 ; 22	13 ; 24

Notes: The Table reports the RD specification estimates associating Probability that Parents Expect Kid Reaches a Higher Education than them with the ICSC index. The table reports three different estimates for each estimation: Conventional, Bias-Corrected, and Robust-Bias-Corrected. According to Cattaneo et al. (2020), the estimate considered is the Conventional, while the Confidence Interval and p-value of the Robust-Bias-Corrected estimate are taken into account for inference; see text for details. In all specifications, the dependent variable is the Probability that Parents Expect Kid Reaches a Higher Education than them conducted by INEEd in 2017 and 2020 to third and sixth graders' families. The ICSC index measures the vulnerability of the area where the school is located according to socio-economic indicators; see text for details. It is rescaled in such a way that a school is eligible to be APRENDER if its index is higher than zero; otherwise, it should be UC. Each (1)-(7) column specifies different model specifications detailed in them. (2)-(4) include different bandwidth selection methods, (5) includes different order of the Local Polynomial, (6)-(7) include different kernel functions. All specifications have a sharp RD design due to perfect compliance. Grade, year and region fixed effects are implemented in every specification. Clusters at the school level are taken in every specification. Kernel indicates how the observations are weighted. Bandwidth Selection indicates the criteria used to choose bandwidth. Order Loc. Poly. (p) indicates the order of the local polynomial used for the estimation. The mean and standard deviation of the dependent variable are measured inside the bandwidth used for the estimation. Effective observations are those that are taken into account in local estimations. Standard errors in parenthesis. Confidence Intervals in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Table 82: **Sensitivity to observations near the cutoff: Family Valuation of *Comisión de Fomento* Index**

	(1)	(2)	(3)	(4)
	0	0.01	0.02	0.03
Conventional	0.248*	0.248*	0.165	0.165
	(0.142)	(0.142)	(0.164)	(0.164)
	[-0.031,0.527]	[-0.031,0.527]	[-0.158,0.487]	[-0.158,0.487]
Bias-corrected	0.283**	0.283**	0.201	0.201
	(0.142)	(0.142)	(0.164)	(0.164)
	[0.004,0.562]	[0.004,0.562]	[-0.122,0.523]	[-0.122,0.523]
Robust	0.283*	0.283*	0.201	0.201
	(0.165)	(0.165)	(0.190)	(0.190)
	[-0.041,0.607]	[-0.041,0.607]	[-0.172,0.573]	[-0.172,0.573]
Controls:				
Grade FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes
Kernel	Triangular	Triangular	Triangular	Triangular
Bandwidth Selection	MSE-optimal	MSE-optimal	MSE-optimal	MSE-optimal
Order Loc. Poly. (p)	1	1	1	1
Mean Dep. Var.	-0.088	-0.088	-0.114	-0.114
SD Dep. Var.	1.001	1.001	1.008	1.008
Observations	2,197	2,197	2,151	2,151
Eff. Obs. at the Left ; Right	230 ; 373	230 ; 373	295 ; 358	295 ; 358
Eff. Schools at the Left ; Right	9 ; 14	9 ; 14	11 ; 13	11 ; 13

Notes: The Table reports the RD specification estimates associating parents' valuation of *Comisión de Fomento* with the ICSC index. The table reports three different estimates for each estimation: Conventional, Bias-Corrected, and Robust-Bias-Corrected. According to Cattaneo et al. (2020), the estimate considered is the Conventional, while the Confidence Interval and p-value of the Robust-Bias-Corrected estimate are taken into account for inference; see text for details. In all specifications, the dependent variable is a *Comisión de Fomento* standardized parents' valuation index using data from Aristas. The ICSC index measures the vulnerability of the area where the school is located according to socio-economic indicators; see text for details. It is rescaled in such a way that a school is eligible to be APRENDER if its index is higher than zero; otherwise, it should be UC. Each (1)-(4) column specifies the same model for different ranges of observations near the cutoff excluded. The range excluded on each side of the cutoff is detailed in them. Years included in all specifications are 2017 and 2020. All specifications have a sharp RD design due to perfect compliance. Grade, year and region fixed effects are implemented in every specification. Clusters at the school level are taken in every specification. Kernel indicates how the observations are weighted. Bandwidth Selection indicates the criteria used to choose bandwidth. Order Loc. Poly. (p) indicates the order of the local polynomial used for the estimation. The mean and standard deviation of the dependent variable are measured inside the bandwidth used for the estimation. Effective observations are those that are taken into account in local estimations. Standard errors in parenthesis. Confidence Intervals in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

Table 83: **Sensitivity to different specifications: Family Valuation of *Comisión de Fomento* Index**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Conventional	0.248*	0.259**	0.169	0.299**	0.291*	0.219	0.201
	(0.142)	(0.127)	(0.154)	(0.131)	(0.157)	(0.142)	(0.131)
	[-0.031,0.527]	[0.010,0.509]	[-0.132,0.470]	[0.043,0.555]	[-0.017,0.599]	[-0.059,0.498]	[-0.056,0.457]
Bias-corrected	0.283**	0.300**	0.193	0.331**	0.324**	0.256*	0.244*
	(0.142)	(0.127)	(0.154)	(0.131)	(0.157)	(0.142)	(0.131)
	[0.004,0.562]	[0.051,0.550]	[-0.108,0.495]	[0.074,0.587]	[0.016,0.632]	[-0.023,0.534]	[-0.012,0.501]
Robust	0.283*	0.300**	0.193	0.331**	0.324*	0.256	0.244
	(0.165)	(0.139)	(0.196)	(0.143)	(0.193)	(0.156)	(0.156)
	[-0.041,0.607]	[0.028,0.573]	[-0.190,0.577]	[0.050,0.611]	[-0.055,0.702]	[-0.050,0.562]	[-0.062,0.551]
Controls:							
Grade FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	No	No	No	No	No	No	No
Region FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Kernel	Triangular	Triangular	Triangular	Triangular	Triangular	Epanechnikov	Uniform
Bandwidth Selection	MSE-optimal	MSE two	CER-optimal	CER two	MSE-optimal	MSE-optimal	MSE-optimal
Order Loc. Poly. (p)	1	1	1	1	2	1	1
Mean Dep. Var.	-0.088	-0.103	-0.074	-0.092	-0.126	-0.088	-0.092
SD Dep. Var.	1.001	1.021	1.008	1.004	1.011	1.001	1.004
Observations	2,197	2,197	2,197	2,197	2,197	2,197	2,197
Eff. Obs. at the Left ; Right	230 ; 373	488 ; 345	103 ; 338	295 ; 338	453 ; 432	230 ; 373	295 ; 404
Eff. Schools at the Left ; Right	9 ; 14	17 ; 19	4 ; 12	11 ; 15	15 ; 16	9 ; 14	11 ; 15

Notes: The Table reports the RD specification estimates associating Family Valuation of *Comisión de Fomento* Index with the ICSC index. The table reports three different estimates for each estimation: Conventional, Bias-Corrected, and Robust-Bias-Corrected. According to Cattaneo et al. (2020), the estimate considered is the Conventional, while the Confidence Interval and p-value of the Robust-Bias-Corrected estimate are taken into account for inference; see text for details. In all specifications, the dependent variable is the Family Valuation of *Comisión de Fomento* Index conducted by INEEd in 2017 and 2020 to third and sixth graders' families. The ICSC index measures the vulnerability of the area where the school is located according to socio-economic indicators; see text for details. It is rescaled in such a way that a school is eligible to be APRENDER if its index is higher than zero; otherwise, it should be UC. Each (1)-(7) column specifies different model specifications detailed in them. (2)-(4) include different bandwidth selection methods, (5) includes different order of the Local Polynomial, (6)-(7) include different kernel functions. All specifications have a sharp RD design due to perfect compliance. Grade, year and region fixed effects are implemented in every specification. Clusters at the school level are taken in every specification. Kernel indicates how the observations are weighted. Bandwidth Selection indicates the criteria used to choose bandwidth. Order Loc. Poly. (p) indicates the order of the local polynomial used for the estimation. The mean and standard deviation of the dependent variable are measured inside the bandwidth used for the estimation. Effective observations are those that are taken into account in local estimations. Standard errors in parenthesis. Confidence Intervals in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

K Appendix: Effect of APRENDER on schooling trajectories in 2020

Table 84: **Effect of APRENDER on ANEP outcomes in 2020**

	Grade Retention		Dropout	
	(1)	(2)	(3)	(4)
Conventional	-2.622*	-3.760***	5.017	3.619
	(1.491)	(1.310)	(8.046)	(6.926)
	[-5.544,0.301]	[-6.327,-1.194]	[-10.754,20.787]	[-9.956,17.195]
Bias-corrected	-3.206**	-4.411***	1.961	0.977
	(1.491)	(1.310)	(8.046)	(6.926)
	[-6.129,-0.284]	[-6.978,-1.845]	[-13.810,17.731]	[-12.598,14.553]
Robust	-3.206*	-4.411***	1.961	0.977
	(1.675)	(1.433)	(9.196)	(7.913)
	[-6.489,0.077]	[-7.219,-1.604]	[-16.064,19.985]	[-14.531,16.486]
Controls:				
Grade FE	Yes	Yes	Yes	Yes
Region FE	No	Yes	No	Yes
Kernel	Triangular	Triangular	Triangular	Triangular
Bandwidth Selection	MSE-optimal	MSE-optimal	MSE-optimal	MSE-optimal
Order Loc. Poly. (p)	1	1	1	1
Mean Dep. Var.	5.198	5.459	71.938	72.694
SD Dep. Var.	7.014	7.556	32.849	32.441
Observations	3,005	3,005	3,005	3,005
Eff. Obs. at the Left ; Right	498 ; 432	528 ; 480	498 ; 462	630 ; 522
Eff. Schools at the Left ; Right	83 ; 72	88 ; 80	83 ; 77	105 ; 87

Notes: The Table reports the RD specification estimates associating Grade Retention and Dropout with the ICSC index. The table reports three different estimates for each estimation: Conventional, Bias-Corrected, and Robust-Bias-Corrected. According to Cattaneo et al. (2020), the estimate considered is the Conventional, while the Confidence Interval and p-value of the Robust-Bias-Corrected estimate are taken into account for inference; see text for details. In (1)-(2) specifications, the dependent variable is the percentage of students that were grade-retained and in (3)-(4) the percentage of students that attended less than 70 days in the academic year. In all specifications students are between first and sixth grade across schools using data from ANEP. The ICSC index measures the vulnerability of the area where the school is located according to socio-economic indicators; see text for details. It is rescaled in such a way that a school is eligible to be APRENDER if its index is higher than zero; otherwise, it should be UC. All specifications implement a sharp RD design due to perfect compliance. Grade fixed effects are implemented in every specification. (2) and (4) also include region fixed effects. Clusters at the school level are taken in every specification. Kernel indicates how the observations are weighted. Bandwidth Selection indicates the criteria used to choose bandwidth. Order Loc. Poly. (p) indicates the order of the local polynomial used for the estimation. The mean and standard deviation of the dependent variable are measured inside the bandwidth used for the estimation. Effective observations are those that are taken into account in local estimations. Standard errors in parenthesis. Confidence Intervals in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.