



# The Impacts of Full-Time Education in Latin America

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## Introduction

The successful implementation of full-time education programs has the potential to significantly address the learning gaps that have emerged as a result of the COVID-19 pandemic. Moreover, the expansion of full-time schooling offers a strategy for minimizing social problems that affect students and their families. This technical note explores these issues, drawing on scientific evidence on the effectiveness of programs implemented in schools in Latin America.

The 2022 Programme for International Student Assessment (PISA) results revealed a significant decline in global learning after the COVID-19 pandemic. Distance learning has not been able to mitigate this educational loss substantially. The situation is particularly alarming in Latin America and the Caribbean: schools have been closed, fully or partially, on average for almost 60 weeks, one of the longest periods compared to other regions of the world. The extended interruption of educational activities had a profound effect on student achievement. For instance, 15-year-old students saw their math learning set back the equivalent of seven months.<sup>4</sup>

The negative impacts extend beyond older students to younger ones as well, where there is evidence of an even stronger impact. Progress in International Reading Literacy Study (PIRLS) data indicate setbacks in foundational reading skills among 4th graders. Most countries that participated in the PIRLS in 2021 showed an increase in the number of children with reading proficiency below the minimum compared to 2016. In some countries, such as South Africa, an average student experienced a loss almost equivalent to a full year of learning in reading.<sup>5</sup>

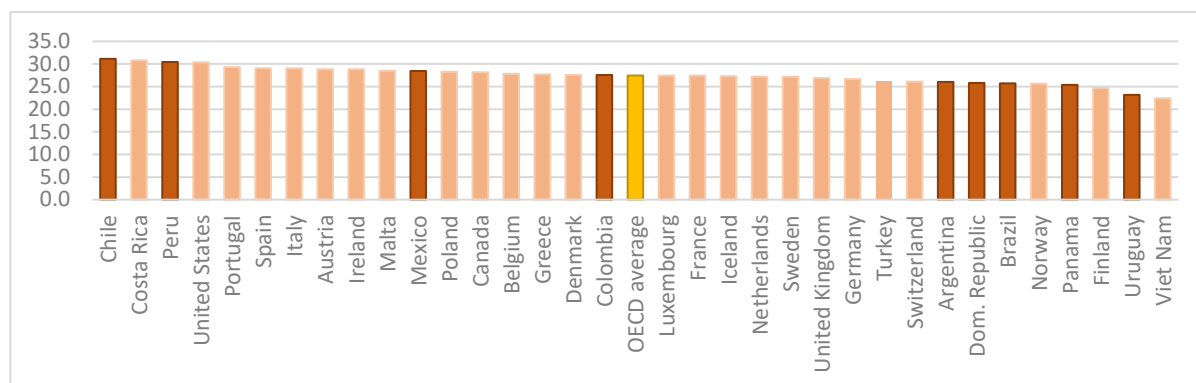
One strategy to address the learning crisis, which was already being developed before the pandemic, is to increase the school hours. This can be done through extended school days or full-time schools. According to OECD data, there is considerable variation in the number of hours of instruction in Latin America and the Caribbean schools. Chile leads with the highest school workload, reaching 31 hours per week, while Uruguay has 23.2 hours. Countries such as Peru, Argentina, the Dominican Republic, Brazil, and Uruguay have a course load of education below the OECD average of 27.5 hours.

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<sup>4</sup> (Jakubowski et al., n.d.)

<sup>5</sup> (*New Literacy Data Shines a Spotlight on the Learning Crisis*, 2023)

**Figure 1 - Average instructional time per week for 15-year-old students**



Source: PISA, 2018. Table V.B1.6.1. Selected countries and regions: Latin America and the Caribbean, Western Europe, the United States, and Vietnam.

Several countries in the region are implementing, although generally still to a limited extent, full-time schooling programs or extended day programs, both at the national and local levels, to increase instructional time and provide quality education for the integral development of students. Extended day programs aim to increase the length of school days without significantly changing the curriculum, pedagogical structure, or resources available in schools. On the other hand, full-time programs not only extend the length of the school day but also promote a revision of the curriculum, offer professional development for teachers and administrators, and introduce other significant transformations in school routines.

Full-time schools are designed with a number of objectives that vary depending on the specific program. Among these objectives are: to improve students' academic performance by providing more hours for learning and reinforcement in core subjects; enrich formal education with diversified extracurricular activities, including sports, arts, and technology; foster the development of teamwork, leadership and resilience skills; tackling educational inequalities by ensuring that students from diverse social backgrounds have access to wider learning opportunities; and promote the health and well-being of students through a balanced nutrition and health care. The achievement of these objectives aims at the integral development of students in multiple dimensions: cognitive, physical, affective, socioemotional, social and cultural.

This technical note is based on studies and scientific evidence<sup>6</sup> that evaluate the impact of full-time school and extended hours. Through statistical methods, it is possible to estimate what would have happened in the absence of such policies, creating a similar scenario that allows for

<sup>6</sup> Only scientific articles or published reports, or working articles in English published in Working Paper Series.

a rigorous comparison.<sup>7</sup> The technical note highlights the results of 22 studies that employed quasi-experimental and experimental methods. In the appendix, there is a table with the description of the studies.

The key findings of the studies are: (i) limited but positive impact on reading in early years of schooling; (ii) positive impact on mathematics and language in primary and secondary schools; (iii) mixed results on schools repetition and dropout; (iv) higher impacts of full-time education in more disadvantageous contexts; (v) rural and public full-time school have greater impact on students learning; (vi) full-time school contributes to students' socioemotional development and to the reduction of teenage pregnancy and crime; (vii) positive impact on the insertion of mothers and grandmothers into the labor market, and (viii) students switching from private to public schools.

Divided into four sections, the technical note addresses the impact of full-time school programs on learning, repetition and permanency in school; the variation of the effects according to the type of school, students and programs; the effects on other outcomes, such as socioemotional development, pregnancy, crime, the labor market, and switching from private to public schools; and concludes with a synthesis of the results found.

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<sup>7</sup> Impact evaluation consists of measuring the contribution of a public policy, i.e., the difference between the scenario observed with the implementation of the program and the hypothetical scenario that would have occurred in its absence. Taking the full-time education policy as an example, the impact on the mathematics performance of a student who participated in the program is determined by the difference between his score after the implementation of the policy and the score he would have achieved without the existence of the policy. A simplistic approach could attempt to estimate the impact by directly comparing the scores of students who participated in the program with those of students who did not. However, this estimate would be naive, as it is likely that these groups of students possess distinct characteristics. For example, many programs are targeted at schools of low socioeconomic status, which means that a comparison between different schools could result in a biased estimate. Another simplistic approach would be to compare the same student's grades before and after the policy was implemented. This estimate is also considered naive, as factors other than politics may have influenced student performance, such as an increase in household income in the region, which could improve student socioeconomic conditions and, consequently, school performance.

## Do students in full-time schools learn more?

### 1. Impacts during the early years of schooling (early childhood education and early literacy)



It is natural to assume that children will learn more if they spend more time in school. However, if the quality of that time is low or even worse than an adult supervision at home, they may learn less. What does the scientific evidence show in this regard?



Limited but **positive** evidence

There are few studies that show the impact of full-time school on the quality of early childhood education and early grades literacy in Latin America. An analysis of several studies that considered other regions found that the evidence we have so far does not allow us to draw many conclusions about the effects of more instructional time on children's learning or development.<sup>8</sup> In fact, there is no robust evidence for Latin America and Caribbean countries. In contrast, in the United States, children who attended a 5-day-a-week preschool program exhibited notable enhancements in their vocabulary skills compared to their peers in a 4-day-a-week program. This suggests that increased preschool attendance could yield educational advantages.<sup>9</sup>



Regarding literacy, in Chile, 2nd-grade students who attended extended day school improved their reading skills more than part-time school students. The improvement was more pronounced among girls than boys, more notable in urban schools than in rural ones, and more significant in municipal schools than in private schools that receive government-subsidized students.<sup>10</sup> In addition, students who participated for two years in the extended school day program had a greater improvement in reading skills than those who were exposed for only one year.<sup>11</sup>

The conclusion about the impact of full-time school on early childhood education and in early literacy is that the evidence is still limited to be generalized. Only one robust study of program implementation in a developed country suggests that extending pre-school hours can significantly improve children's vocabulary skills. However, this evidence cannot be generalized

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<sup>8</sup> (Cooper et al., 2010)

<sup>9</sup> (Atteberry et al., 2019)

<sup>10</sup> In Chile, voucher schools are those in which parents receive a subsidy from the government to be able to enroll their children.

<sup>11</sup> (Berthelon et al., 2016)

globally due to contextual differences. As for literacy, the Chilean experience indicates an improvement in reading skills among 2nd-grade students in extended schools, suggesting that more instructional time can contribute to a more effective teaching of reading skills. However, more research is needed to understand the underlying mechanisms and to verify whether these findings are replicable in different contexts. Therefore, full-time school programs in preschool and early primary school should be accompanied by high-quality impact evaluations to ensure that investments are guided by tangible outcomes in the development of students' skills.

## 2. Impact on mathematics and language



this regard?

There is a great expectation that if the class time in math and language is longer, students will learn more. However, this relationship may be more complex than this. Students may, for example, feel tired from extended class days and, put in less effort during classes or on homework, and may only learn what they would in a school with a normal schedule. What does the scientific evidence show in



**Positive Impact, with the exception of one study**

Of the eight studies looking at the effects of full-time education on language and math learning, seven found positive effects, including Brazil, Mexico, Chile, Uruguay, Peru and Colombia. Brazil and Chile have experiences of extended day programs at the national level. Uruguay, Colombia, Mexico, Peru and some Brazilian states have full-time programs.



At the federal level, the Brazilian *Mais Educação* program, initiated in 2008, aimed to extend the regular school day from 4.5 hours to at least 7 hours. The program did not contribute to the improvement of Portuguese and mathematics grades, even presenting negative results on the students' performance in some cases<sup>12</sup>. The unsatisfactory results observed can be attributed to the obstacles encountered during the initial stages of program execution. For example, the increase

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<sup>12</sup> For example, schools that chose to use the additional time for Portuguese or sports had reduced math scores and Portuguese for 5th grade.

in school hours may have negatively interfered with the students' learning routine and teachers' pedagogical practice.<sup>13</sup>

However, other full-time school programs in Brazil have positively affected student learning. One of these programs is located in the state of São Paulo, where the school-day has been increased from the regular 4 hours to more than 7 hours a day (reaching up to 9 hours a day). This program implemented significant changes in the school curriculum and the allocation of teachers in schools. In addition to providing extra time for math and Portuguese, students could choose electives that promoted interdisciplinary work. In addition, the teachers devoted themselves exclusively to the full-time school and received additional remuneration. The results of this program were impressive, with improvement in the math and language grades of 9th graders. However, it is unclear what caused this improvement: whether it was the extra time dedicated to the subjects of mathematics and Portuguese, the exclusive dedication of the teachers, or other program characteristics.<sup>14</sup>

In the state of Pernambuco, located in the Northeast of Brazil, the full-time school program, which is operated in two distinct formats – the semi-full-time, with a 35-hour class week, and the full-time, with 45 hours of classes per week – has shown positive results regarding the academic performance of upper secondary students. The schools participating in the program increased the mathematics workload from 3.3 to 5 hours per week, and the Portuguese workload from 4.2 to 5 hours. Similar to the program in São Paulo, students were given a diverse curriculum that included a subject called "life project." This subject allowed students to explore topics such as community values, financial literacy, and business management. In addition, as in São Paulo, the teachers in this program dedicated themselves exclusively to full-time school and received extra compensation. Improvements were also made to the infrastructure of the schools, including the creation of art laboratories and rooms for group study. Students in full-time schools performed better in math and language than students in regular schools. The positive results are higher in schools that offer extra activities, such as tutoring, in addition to increasing math and Portuguese hours.<sup>15</sup>



In Mexico, the Full-Time Schools program (PETC) started in 2007 with the aim of providing greater learning opportunities for children and young people. PETC was discontinued in 2022 but some states remain implementing a similar program. The program increased class hours to include extra activities that help in the integral development of students. The program had positive effects on the learning outcomes of primary school students and reduced the age-grade distortion. The benefits are especially significant for students from the most vulnerable and marginalized schools.<sup>16</sup> In addition, the positive effect of the program grows over time, especially among more

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<sup>13</sup> (Almeida et al., 2016)

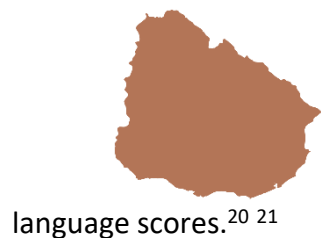
<sup>14</sup> (Fukushima et al., 2023)

<sup>15</sup> (Rosa et al., 2022)

<sup>16</sup> (Silveyra et al., 2007)

vulnerable students. This is due, in part, to the improvement of teachers' pedagogical practices, an improvement self-reported by teachers.<sup>17</sup> An example of this is that in Mexico City, students from comprehensive schools scored higher on high school admissions tests compared to students from regular schools.<sup>18</sup>

In Chile, an extended day program model was implemented, in which the school participating in the program could choose how it would use the additional instructional time. On average, schools used about 42% of that extra time to teach math and language. The results of the learning assessments of 9th and 10th grade students improved due to the program, but the increase was not as large as that observed in Pernambuco, Brazil.<sup>19</sup>



In Uruguay, a full-time school program has been created, increasing workload from 3.5 hours per day to 7 hours. In addition, the program gave more physical resources (classrooms, books, and teaching materials) to schools and focused on teacher training. Grade 6 students had significant improvements in math and

language scores.<sup>20 21</sup>

In 2014, Colombia adopted a countrywide full-time education policy. The municipalities were responsible for deciding how many places would be allocated to full-time and part-time education, based on local demand. Schools that offer full-time education typically have two to three more hours of class time compared to regular shift schools. The implementation of this policy has had a positive impact on students' academic performance, especially in Mathematics for students in grades 5 and 9. In addition, there was an improvement in language grades for 9th graders.<sup>22</sup>



In Peru, the full-time schooling program has positively impacted performance in math and reading. The schools that participated increased the school day by two hours, totaling 45 hours per week. The program has also improved pedagogical support for teachers, given more access to computers, and increased school staffing with psychologists and guards. An important point was that teachers in full-time schools specialized more in a single

subject, thus reducing the variety of subjects they had to teach. In addition, there was no change in the commitment of teachers, considering that the time dedicated to school activities remained

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<sup>17</sup> (Padilla-Romo, 2022)

<sup>18</sup> (Cabrera-Hernández et al., 2023)

<sup>19</sup> (Bellei, 2009)

<sup>20</sup> (Cerdan-Infantes and Vermeersch, 2007)

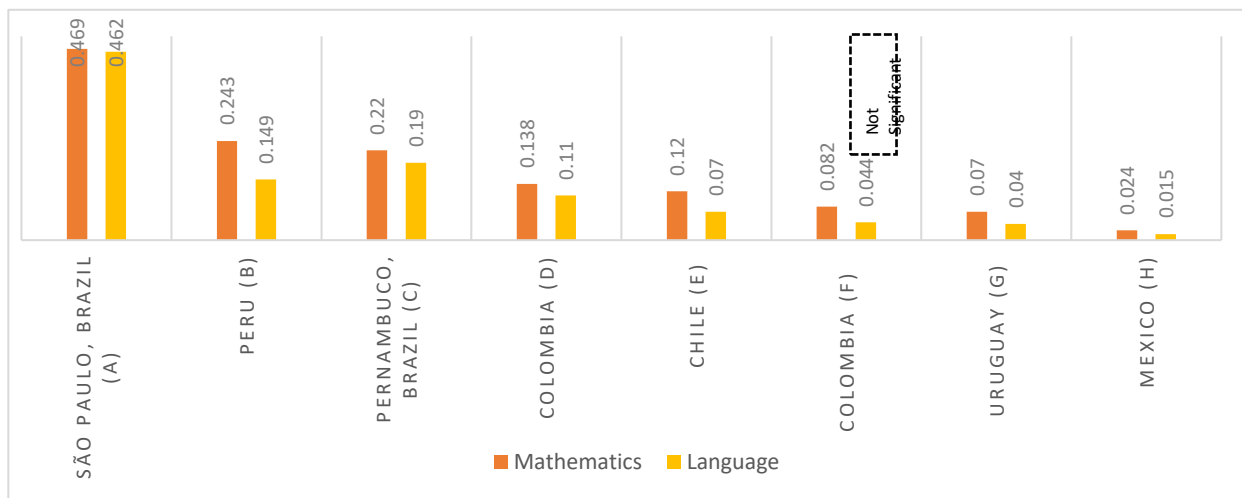
<sup>21</sup> An unpublished article shows that the same program has a negative impact on PISA reading scores (Llambí, 2013). The article was not included in this review because it did not meet the eligibility criteria.

<sup>22</sup> (Hincapie, 2016)

unchanged. It is important to consider that, with the increase in students' time in school, one could expect a change in parents' behavior, perhaps helping less with their children's schoolwork. However, it was observed that there was no significant change in the time that parents dedicate to these activities. On the other hand, there was a change in the children's time allocation. The children in the program spent less time on household chores, other obligations, leisure, and sleeping, because of the longer school hours.<sup>23</sup>

It is observed that, in general, full-time education programs have a more significant impact on students' performance in mathematics than in language (Figure 2). In addition, studies conducted in Colombia indicate that this impact tends to be more pronounced among students in the final years of lower secondary school than in the initial years. This evidence suggests that the extension of school hours can benefit in a differentiated way the different areas of knowledge and the different levels of schooling.

**Figure 2 – Results in Mathematics and Language in Standard Deviations**



Note 1: *Mais Educação* (Almeida et al., 2016) was not included because the results were not reported in standard deviations.

Note 2: (a) Lower Secondary School (Fukushima et al., 2023); (b) Lower Secondary School (Agüero et al., 2021); (c) Upper Secondary School (Rosa et al., 2022); (d) Lower Secondary School I (Hincapie, 2016); (e) Upper Secondary School (Bellei, 2009); (f) Primary School (Hincapie, 2016); (g) Primary School (Cerdan-Infantes & Vermeersch, 2007); (h) Primary School (Padilla-Romo, 2022)

The evaluation of the various full-time education programs in Latin America suggests that while initial results may vary, many of these programs have the potential to significantly improve students' academic performance, especially in mathematics. In Brazil, the national *Mais Educação* program faced initial challenges that negatively impacted student grades, but programs in São Paulo and Pernambuco, which included curriculum changes and teachers' exclusive dedication, resulted in notable gains in math and language.

<sup>23</sup> (Agüero et al., 2021)

In Mexico, PETC has demonstrated long-lasting positive effects, especially in vulnerable schools. In Chile and Uruguay, the extension of school time, along with additional resources and teacher training, has led to improvements in student achievement. Colombia's full-time education policy has also resulted in academic advancements, with an emphasis on mathematics. In Peru, the increase in the school day and the specialization of teachers have been accompanied by constant parental involvement and improvements in school infrastructure, contributing to the success of the program.

**These results indicate that full-time programs can be effective, but their success may depend on a number of factors, including the quality of implementation, the curriculum design, teacher training and dedication, parental involvement, and school infrastructure.**

### 3. Impact on school repetition and dropout



If students prefer to avoid school or the subjects' contents are considered more difficult in full-time schools, staying longer in the school environment may contribute to students repeating or wanting to drop out of school. If full-time schools require students to stay in school longer, more vulnerable students could find it challenging to stay in school due to the need to do household chores or work. However, if the full-time school is a comfortable and welcoming place, students may enjoy studying more and put in more effort. These ideas all suggest that full-time schools can impact school repetition and dropout. What does the scientific evidence show in this regard?

Reduction  
in repetition rates

in



Reduction in dropout  
rates



**Results vary: Positive, Negative, and Non-impactful evidence**

Of the two studies looking at the effects of full-time education on reducing school repetition, one found positive effects and one negative. Of the three studies that analyze the impact of full-time work on reducing dropout, one of them found a positive result and two of them did not find an impact.

In Colombia, full-time schools have helped decrease the percentage of students who drop out of school or repeat the year. These schools reduced dropout by 1 to 2 percentage points and repetition by 2 to 5 percentage points. Two main reasons may explain this. First, in schools that operate in double shifts (morning and afternoon), the classroom is shared, hindering the personalization of the learning environment or the use of educational resources specific to the needs of the students, such as, for example, the exhibition of student work, reference materials, reading spaces, information or welcome walls. In contrast, classrooms in full-time schools can

foster greater student engagement and strengthen a sense of belonging in the school environment. Second, by increasing the amount of time students spend under adult supervision, full-time schools can make up for the lack of academic supervision and support they might otherwise have at home. This compensatory measure has the potential to improve students' educational performance, strengthen the bond with the school community, and thus reduce the incidence of failure and promote permanence in school.<sup>24</sup>

In Buenos Aires, Argentina, about half of the schools extended the school day to 8 hours a day in 1971. The schools were chosen at random, and researchers followed the students who entered the full-time and part-time schools in the following years. Failure rates were higher in full-time schools among upper secondary students when compared with part-time schools. For primary school students, there were no changes. On the other hand, the upper secondary graduation rate was 21% higher for those who studied full-time, suggesting that the program has helped reduce the number of students who drop out of school, although there is no information on how many students actually left school.<sup>25</sup>

In Brazil, the *Mais Educação* program did not help reduce school dropouts in the fifth and ninth grades. In addition, it was found that, in richer municipalities with higher GDP per capita, the *Mais Educação* program increases the dropout rate. However, it appears that greater investment in the program could mitigate this trend. On average, for every R\$ 100 invested per student in schools participating in *Mais Educação*, there is a reduction of 1 percentage point in the school dropout rate.<sup>26</sup> In Pernambuco, the full-time program did not affect dropout rates. It can be assumed that students from lower socioeconomic status would be more likely to drop out of full-time schools due to a higher opportunity cost, such as the need to work. However, the evidence does not show that this is the case.<sup>27</sup>

In summary, the adoption of the full-time school model in Colombia and Argentina has had beneficial effects in reducing dropout and repetition rates. Meanwhile, in Brazil, the *Mais Educação* program did not have an impact on school dropouts, even increasing the rate in certain municipalities. These mixed results underscore the complexity of the educational challenges and the need for further study to better understand the effects of full-time schools on school failure and dropout.

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<sup>24</sup> (García et al., 2013)

<sup>25</sup> (Llach et al., 2009)

<sup>26</sup> (Almeida et al., 2016)

<sup>27</sup> (Rosa, 2019)

# Does full-time school affect schools, students, and teachers in different ways?



In section 2, we show that, in general, full-time or extended school days improve students' performance in mathematics and languages. But do all students benefit equally? Is this effect more substantial for boys or girls? What about schools situated in more prosperous cities or urban areas? Let's explore these and other questions in this section.



## 1. Socioeconomic status

### Municipality's Wealth Level

In Brazil, schools located in municipalities with a higher GDP per capita, compared to those in less rich municipalities, had greater advantages from full-time education in improving mathematics performance among 5th graders. However, schools located in municipalities with a higher GDP per capita had higher school dropouts in the 5th grade with full-time school than those located in less wealthy municipalities.<sup>28</sup>

### Socioeconomic Level of the School

In Colombia, full-time education improves performance in mathematics and language, especially in schools of lower socioeconomic levels. Full-time education did not have significant effects in schools with more advantaged socioeconomic conditions.<sup>29</sup> In Mexico, the trend is similar: schools in more disadvantaged areas have made greater progress in math and language.<sup>30</sup>

### Student's Socioeconomic Level

In Chile, full-time education seems to benefit students from all socioeconomic backgrounds in a similar way.<sup>31</sup> On the other hand, in Buenos Aires, Argentina, students from lower socioeconomic status benefit the most from full-time education, especially at the end of upper secondary.<sup>32</sup>

In summary, the impact of full-time education on students' academic performance and permanence in school varies according to socioeconomic context. The studies point to both sides, that is, some identify greater benefits in contexts of higher socioeconomic status, others in contexts of lower socioeconomic status. However, there is a greater body of evidence showing higher impacts of full-time education in more disadvantageous contexts.

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<sup>28</sup> (Almeida et al., 2016)

<sup>29</sup> (Hincapie, 2016)

<sup>30</sup> (Silveyra et al., 2007)

<sup>31</sup> (Bellei, 2009)

<sup>32</sup> (Llach et al., 2009)



## 2. Characteristics of the schools

### Urban vs. Rural Schools:

In Chile and Colombia, evidence indicated that students in rural full-time schools had a greater increase in levels of learning in mathematics and language compared to urban full-time schools. In Mexico, this greater effect for rural schools is observed only in language performance.<sup>33</sup> However, in Chile, literacy skills (early years of schooling) increased more among urban full-time schools than among rural ones.<sup>34 35 36</sup>

### Type of administration:

Also, in Chile, the government finances public schools for extended periods and subsidizes enrollment in extended day private schools.<sup>37</sup> The impacts of increasing instructional hours on mathematics learning are greater in municipal public schools than in extended day private schools. In addition, literacy skills tend to improve more with extended day in municipal schools than in private schools with subsidized enrollment.<sup>38 39</sup>

In summary, full-time education may be more effective in advancing the learning of mathematics and languages in rural areas, while extended day urban schools showed better results in the early literacy stage. In addition, in the Chilean context, extended day municipal schools show more significant gains in mathematics and literacy compared to private schools with government-subsidized enrollment.



## 3. Characteristics of the students

### Gender:

In Brazil, there is evidence that upper secondary boys benefit more from full-time teaching in Mathematics and Portuguese compared to girls. In Chile, this distinction between genders is not

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<sup>33</sup> (Padilla-Romo, 2022)

<sup>34</sup> (Bellei, 2009)

<sup>35</sup> (García et al., 2013)

<sup>36</sup> (Berthelon et al., 2016)

<sup>37</sup> Schools Vouchers

<sup>38</sup> (Bellei, 2009)

<sup>39</sup> (Berthelon et al., 2016)

clear in the more advanced grades. However, in the early grades, girls demonstrate greater progress in reading with full-time education.<sup>40 41 42</sup>

#### **Age:**

In Brazil, students above the expected age for the respective year have a lower gain from full-time school compared to those who are at the age considered adequate.<sup>43</sup>

#### **Academic Performance:**

In Chile, students with higher academic performance records benefit the most from the extended hours program.<sup>44</sup>

In summary, in Brazil, full-time education favors boys more in Mathematics and Portuguese, while in Chile, girls in the early years advance more in reading. Students at the adequate age for the grade in Brazil benefit most from the program, and in Chile, high-achievers benefit more from extended hours.



### **4. Teachers' Characteristics**

In Uruguay and Mexico, the evaluation were not possible to disentangle the effect of extended hours and teachers training in the impact of the full-time schooling program. In Pernambuco, Brazil, full-day high schools that had a larger proportion of male teachers are associated with larger effects of the program on student math and language test scores. However, the teachers training received, the exclusive dedication and the number of classes or schools where teachers teach did not affect the results of full-time education programs.<sup>45</sup>



### **5. Class Time and Duration in the Program**

#### **Class Time:**

In Mexico, two distinct full-time school models were in operation, featuring different daily schedules. One model follows a 6-hour class day, while the other extends to an 8-hour class day. Despite the difference in duration, both models have shown comparable positive effects on student performance and learning outcomes.<sup>46</sup> In Brazil, there is a significant difference between studying in a full-time school for three days or five days a week. Students who study in the five-

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<sup>40</sup> (Rosa et al., 2022)

<sup>41</sup> (Bellei, 2009)

<sup>42</sup> (Berthelon et al., 2016)

<sup>43</sup> (Rosa et al., 2022)

<sup>44</sup> (Bellei, 2009)

<sup>45</sup> (Rosa et al., 2019)

<sup>46</sup> (Silveyra et al., 2007)

day model have additional learning gains as they benefit from extra time for independent study and support classes on the additional two days.<sup>47</sup>

### **Duration in the Program:**

In Chile, it is observed that students who have spent two years in a full-time school is associated with a more significant impact compared to students who have only been in a full-time school for one year. In Mexico, it was observed that students who had the experience of a full-time school in the first years of school performed better in mathematics and languages compared to those who were inserted into this educational model later.<sup>48</sup> This indicates that the duration of student involvement in the educational environment is a crucial factor in the effectiveness of the full-time school model.<sup>49</sup>

In summary, the evidence does not allow us to establish a consensus on the ideal model for extending school hours, given the existence of only two studies comparing school hours and the variety of results observed. However, the available data suggest a positive correlation between students' greater exposure to full-time school and improved learning.



## **6. Conclusion: Different People, Different Effects**

Full-time education has different impacts according to the characteristics of schools, students, and teachers. However, there is no single trend that applies universally. Evidence suggests that, in more disadvantaged contexts, both in terms of location (rural schools) and socioeconomic resources, full-time education tends to promote greater student learning, contributing significantly to the reduction of educational inequalities.

The characteristics of the students (gender, age, and academic performance) also influence the impact of full-time schools, although there are still few studies on this subject that allow generalizing the conclusions. For now, the evidence in Brazil indicates that full-time schools benefit more boys in upper secondary and students who are at the adequate age for their grade. In Chile, students with better academic records got more out of extended day education.

There is still little evidence on the influence of teachers' characteristics on the impacts of full-time education, as well as on the ideal workload. However, the available data suggest a positive correlation between students' greater exposure to full-time school and improved learning.

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<sup>47</sup> (Rosa et al., 2022)

<sup>48</sup> (Padilla-Romo, 2022)

<sup>49</sup> (Berthelon et al., 2016)

## Beyond the Reporting Card: Other Effects of Full-Time Education



We know that the school has a much broader role than curricular cognitive and intellectual development of students. When students spend more time in school, it's natural for their behavior to change. This can also affect how families organize and interact. In this section, we will show you how full-time school can influence other important parts of the lives of students and their families.

### 1. Socioemotional



In Peru, the extended school day program not only increased class hours, but also made it possible for schools to have more psychologists working with students. This has demonstrated positive impacts on students' confidence and belief that they can succeed in the future. Feeling good about oneself and believing in one's own abilities are important elements that can make a big difference in students' lives, such as continuing their studies, avoiding risks, and preventing teenage pregnancy. In this way, Peru's holistic educational approach, with more class hours and psychological support, has proven effective in reinforcing students' self-confidence, which is essential for future success and the prevention of social problems.<sup>50</sup>

### 2. Pregnancy and criminality

Increasing the length of time adolescents spend in school can transform their activities and life opportunities by reducing risky behaviors. Having more adult supervision time can help prevent young people from engaging in unprotected sex or committing crimes.



In Chile, for example, more students studying full-time resulted in a lower incidence of pregnancy among girls aged 15 to 19, especially the poorest.<sup>51</sup>



In addition, having more full-time schools in Chile has also helped decrease crime in the region, especially property crimes. In Brazil, in Pernambuco, the impact of full-time education was similar: more time in school led to fewer homicides among young men. This effect was strongest in municipalities where the full-time school program was more common.<sup>52 53</sup>

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<sup>50</sup> (Agüero et al., 2021)

<sup>51</sup> (Berthelon and Kruger, 2011)

<sup>52</sup> (Berthelon and Kruger, 2011)

<sup>53</sup> (Rosa et al., 2022)

## 4. Women's Labor Force Participation



Women often take the lead role in domestic care work, which can limit their employment opportunities. However, when external care services, such as childcare and full-time schools, are available, they gain more freedom to seek and maintain jobs, including full-time jobs, and can thus increase their participation in the labor market.

Three studies conducted in Mexico and Chile indicate that the implementation of full-time schooling has a positive impact on mothers' insertion into the labor market and employment rates by reducing the time devoted to childcare.<sup>54 55 56</sup> Evidence in both countries shows that the expansion of full-time schooling is beneficial for mothers' employment, especially for mothers with less education<sup>57 58</sup> and mothers living in communities with higher levels of poverty<sup>59</sup>.

Full-time school has a generally positive impact on mothers' entry into the labour market, although the effects on working hours are varied. In Chile, a study suggests that extended day school can lead to a reduction in working hours, possibly because it facilitates part-time jobs or reduces childcare expenses, lessening the pressure to work more.<sup>60</sup> On the other hand, additional research in Chile and Mexico indicates an increase in the hours worked by mothers, with increases of approximately 3 hours per week in Chile<sup>61</sup> and 1.8 hours in Mexico<sup>62</sup>. Therefore, we have one study pointing to the reduction and two studies pointing to the increase in working hours, indicating that the trend observed is that full-time school tends to provide mothers with more time to dedicate to work.

It is important to highlight that there is evidence of a positive impact not only on the employment of mothers, but also on that of grandmothers who live with children enrolled in full-time schools. Research conducted in Chile indicates that schools with extended working hours contribute to the increase in employment and participation of grandmothers in the labor market.<sup>63</sup> In addition to the impact on women's employment, there are evidences that full-time school may increase divorce rates in the country. Since women devote more time to childcare than men, the availability of full-time schools allows them to have more time to work, thus altering the

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<sup>54</sup> (Padilla-Romo & Cabrera-Hernández, 2019)

<sup>55</sup> (Berthelon et al., 2023)

<sup>56</sup> (Contreras & Sepúlveda, 2017)

<sup>57</sup> (Padilla-Romo & Cabrera-Hernández, 2019)

<sup>58</sup> (Berthelon et al., 2023)

<sup>59</sup> (Padilla-Romo & Cabrera-Hernández, 2019)

<sup>60</sup> (Contreras & Sepúlveda, 2017)

<sup>61</sup> (Berthelon et al., 2023)

<sup>62</sup> (Padilla-Romo & Cabrera-Hernández, 2019)

<sup>63</sup> (Cabrera-Hernández & Padilla-Romo, 2020)

dynamics of women's financial independence, domestic bargaining power, and consequently may lead to an increase in divorce rates.<sup>64</sup>

In summary, the implementation of full-time schools has been shown to be beneficial for the insertion of women in the labor market, expanding employment opportunities for mothers and grandmothers.

## 5. Migration of students



Evidence in Pernambuco, Brazil, suggests that the implementation of full-time schools may have stimulated the transfer of 9th grade students from private institutions to public schools that offer full-time secondary education. This phenomenon resulted in the closure of some private schools, particularly in contexts where educational performance between public and private schools was similar, leading students to switch to full-time public upper secondary school.<sup>65</sup>

## 6. Conclusion: Full-Time Integral Education

In summary, the impact of full-time education goes beyond academic, cognitive, and intellectual development, having significant repercussions on the lives of students and their families. In Peru, expanded teaching hours and psychological support have improved students' self-confidence, a crucial factor in future success and the prevention of social problems. In Chile, comprehensive education reduced teenage pregnancy and crime, while in Pernambuco, Brazil, there was a decrease in youth homicides. For women, the availability of full-time schools has been an empowering factor, allowing for greater participation in the labor market and altering family dynamics, as evidenced by the increase in divorce rates. In addition, the migration of students from the private sector to full-time public schools in Pernambuco reflects the appreciation of full-time education. In summary, full-time education has multifaceted effects that transcend the school environment, positively influencing socio-emotional development, the reduction of risk behaviors, and the dynamics of the labor market.

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<sup>64</sup> (Padilla-Romo et al., 2022)

<sup>65</sup> (Rosa, 2019)

## Conclusion

Evidence is strong that full-time school enhances student learning, especially in the core subjects of mathematics and languages. While there may be concerns about the increased instructional time potentially intensifying student and teacher fatigue, and consequently decreasing engagement in school activities, these adverse effects appear to be outweighed by the significant gains in the quality of teaching and learning with full-time school.

The impact on learning depends on crucial variables, including the adequacy of curriculum and pedagogical practices, teachers characteristics, and infrastructure improvements. In addition, in Brazil, the São Paulo full-time program recorded an impact that doubled in the second year of implementation compared to the first year<sup>66</sup>, evidencing that proper implementation from the beginning is crucial to maximize the impact of the full-time school program.

Such benefits of full-time school are particularly notable among students from disadvantaged socioeconomic backgrounds, those at the adequate age for their grade, with a history of good academic performance, and with a longer time of involvement in the full-time program. Also, full-time schools can contribute to reducing educational inequalities since most evidence shows higher impacts of full-time education in more disadvantageous contexts.

However, there are still gaps in the scientific evidence on the ideal workload, the impact of teacher training and allocation on the effectiveness of full-time school. Still, while the evidence on the positive impact of the programs is robust for primary and secondary school students, more studies are needed for students in the early literacy/early childhood education phase. In Chile, for example, there has been progress in reading skills, but other evidence is scarce.

As for the repetition rate, if students learn more in full-time schools, it is expected that there will be a reduction in this rate, as long as academic expectations are similar to those at regular schools. In fact, the trend is for students in full-time schools to repeat less.

Extending school hours could increase students' dislike of school and lead to school dropouts. However, studies generally do not support this hypothesis: two of the three studies analyzed found no significant impact of full-time school on dropout rates, and a third study suggests that full-time school may in fact reduce dropout.

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<sup>66</sup> Fukushima et al., 2023

Theme	No of evidence	Impact of Full-Time School
Early Years of Schooling	1	Increases reading ability
Mathematics and Languages	8	Improves performance
Repetition	3	Reduces Repetition (predominantly)
Dropout	3	No Impact (predominantly)
Socioemotional development	1	Increase students' confidence
Teenage Pregnancy	1	Reduces pregnancy rate
Homicide	2	Reduces homicide rate
Mothers' participation in the labour market	4	Increases participation

In addition, there is evidence that full-time school contributes to students' socioemotional development and to the reduction of teenage pregnancy and crime. The benefits extend beyond students, positively impacting the insertion of mothers and grandmothers into the labor market. These multifaceted effects show that full-time education can be a powerful tool for post-COVID-19 learning recovery and education and social transformation, if it is carefully planned and executed.

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## Appendix – Literature Review

n	Location (Program)	Authors	Target	Variable	Findings	Methodology
1. Learning Outcomes						
1	Chile	(Berthelon et al., 2016)	Year 2	Reading comprehension skills	Positive (0.14 d.p.)	Instrumental Variable
2	Brazil ( <i>Mais Educação</i> )	(Almeida et al., 2016)	5th and 9th grade	Language	Not Significant	Difference in Differences and Propensity Score Matching
				Mathematics	Negative	
				Dropout	Not Significant	
3	Brazil, São Paulo (PEI)	(Fukushima et al., 2023)	Grade 9	Language	Positive (0.462 d.p.)	Difference in Differences
				Mathematics	Positive (0.469 d.p.)	
4	Brazil, Pernambuco	(Rosa et al., 2022)	10th, 11th, 12th grade	Language	Positive (0.19 d.p.)	Fixed Effects & Instrumental Variable
				Mathematics	Positive (0.22 d.p.)	
5	Mexico (PETEC)	(Silveyra et al., 2007)	Year 6	Mathematics	Positive (reduction of 4.6 percentage points in the proportion of students at the lower learning level).	Difference in Differences

				Language	Positive (reduction of 1.77 percentage points in the proportion of students at the lowest level of learning).	
				Age-grade distortion	Negative (reduction of 0.2 p.p. in the proportion of students with age difference)	
6	Mexico	(Padilla-Romo, 2022)	Grades 3-6	Language	Positive (0.015 d.p – 1 year after intervention and 0.108 d.p – 5 years after intervention)	Bi-Directional Fixed Effects (TWFE)
				Mathematics	Positive (0.024 d.p – 1 year after the intervention and 0.137 d.p – 5 years after the intervention)	
7	Mexico	(Cabrera-Hernández et al., 2023)	Upper secondary Students	High School Admission Test	Positive (0.049 d.p.)	Variation Between Cohorts
8	Chile	(Bellei, 2009)	Grade 9 and Grade 10	Language	Positive (0.05-0.07 d.p.)	Difference in Differences
				Mathematics	Positive (0.00 - 0.12 d.p.)	
9	Uruguay	(Cerdan-Infantes & Vermeersch, 2007)	Year 6	Language	Positive (0.04 d.p.)	Propensity Score Matching
				Mathematics	Positive (0.07 d.p.)	
10	Colombia	(Hincapie, 2016)	Year 5	Language	Not Significant	Fixed Effects (school)
				Mathematics	Positive (0.082 d.p.)	

			Grade 9	Language	Positive (0.110 p.d.)	
				Mathematics	Positive (0.138 d.p.)	
11	Peru	(Agüero et al., 2021)	Grade 8	Language	Positive (0.149 d.p.)	Fuzzy Discontinuity Regression
				Mathematics	Positive (0.243 d.p.)	
				Social-emotional	Positive	
12	Colombia	(García et al., 2013)	Primary and Secondary School	School Dropout	Negative (1 to 2 percentage points)	Fixed Effects Family
				School Repetition	Negative (2 to 5 percentage points)	
13	Argentina	(Llach et al., 2009)	Primary School	School Repetition	Not Significant	Randomization
			Lower Secondary school	School Repetition	Positive (12 percentage points)	
			Lower Secondary school	Upper secondary Graduation	Positive (21% higher than the control group)	
14	Brazil, Pernambuco	(Rosa, 2019)	Lower Secondary school	School Dropout	Not Significant	Difference in Differences + Event Study
	2. Other effects					

15	Chile	(Berthelon and Kruger, 2011)	15-19 years old	Teenage pregnancy	Negative (20 percentage points in program coverage reduces adolescent motherhood by 3.3%)	Fixed Effects
			14-17 years old	Youth crime rates	Negative (20 percentage points in program coverage reduces total crime rates by 19%)	
16	Brazil, Pernambuco	(Rosa et al., 2022)	15-19 years old	Youth homicide rates	Negative (reduced municipal homicide rates by 12 percentage points)	Difference in Differences
17	Chile	(Berthelon et al., 2023)	Mothers of primary school-age children	Mothers' participation in the labor force	Positive (30 percentage points in program coverage increases 9%)	Panel with individual fixed effects
				Maternal employment	Positive (30 percentage points in program coverage increases 8.1%)	
				Mothers' weekly hours worked	Positive (30 percentage points in 3-hour program coverage)	
18	Chile	(Contreras & Sepúlveda, 2017)	Single mothers of children aged 8-13 without minor children	Mothers' participation in the labor force	Positive (5% increase)	Difference-in-Differences & Triple-Differences
				Mothers' weekly hours worked	Negative	
19	Mexico	(Cabrera-Hernández &	Grandparents living with children	Participation in the labour market	Positive (1.8 percentage points)	Difference-in-differences

		Padilla-Romo, 2020)		Employment	Positive (1.6 percentage points)	
20	Mexico	(Padilla-Romo et al., 2022)	Parents	Divorce	Positive (increases divorce rate by 0.105 per 1000 individuals after seven years)	Fixed Effects of Municipality
21	Mexico	(Padilla-Romo & Cabrera-Hernández, 2019)	Mothers of children in primary school	Mothers' participation in the labor force	Positive (increases 5.5 percentage points)	Difference in Differences
				Mothers' weekly hours worked	Positive (increases 1.8 hours)	
22	Brazil, Pernambuco	(Rosa, 2019)	Lower Secondary/Upper secondary students	Migration of students from private to full-time public schools	Positive	Difference in Differences + Event Study