

Public Institutional Integrity in Education

A case study of the Department of Education of Ceará (Brazil)

Carolina Martinelli

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Executive Summary

How to build integrity in public education institutions and improve learning outcomes? This working paper will address these questions by analysing a specific case of success: the public education institution of the State of Ceará, located in the Northeast of Brazil. First, I will discuss the concept of institutional integrity and its five elements: purpose, legitimacy, consistency with commitments, efficient pursuit, and robustness. Second, I will provide a brief overview of the education in Ceará and the sharp increase in basic education outcomes this state has achieved in the last 15 years. After, I will discuss the core of the paper, which is analysing the improvement of education in the state of Ceará through the lens of the public integrity theory. The last session of the paper will be dedicated to key recommendations on how to build integrity in education public institutions. In brief, I suggest that states should promote the improvement in basic education through: 1) fiscal incentives; 2) a robust monitoring system; 3) sharing of good practices 4) autonomy to municipalities, 5) technical support; and 6) valuing teachers financially and symbolically.

Introduction

The quality of public education is one of the main challenges of Brazil's development. Despite significant increases in access since the 1990s, educational outcomes continue at a very low level, especially in the North and Northeast regions. Today, primary education is practically universal (98% of children between 6 and 14 years old are enrolled in elementary schools) (Todos pela Educação, 2020). However, according to a World Bank estimation, the country will take more than 260 years to reach the OECD average proficiency in reading and 75 years in mathematics (Raiser, 2018). Moreover, 29% of the population are functional illiterate, i.e., able to read short and simple messages only.

The poor learning outcomes severely impact the country's development, as education is the main factor for sustained economic growth (Hanushek and Woessmann, 2010). Indeed, despite the rise in school attendance, Brazil's productivity has remained in the same levels for the last 40 years (Hanushek and Woessmann, 2012). Quality education also has several positive externalities to society, such as reduction of crime, increased political consciousness, improved interpersonal communication, and less unwanted pregnancies (Barbosa Filho and de Abreu Pessoa, 2010).

The challenges the Brazilian public education system faces are diverse, ranging from bad school management to low-skilled teachers, and including poor infrastructure at schools. Most schools' principals are still selected by appointment following political criteria, instead of a merit-based process (Takahashi and Saldaña, 2018). Teachers, the key elements of the learning process, are low-paid, and their training is in general deficient. In the Language degree, for instance, only 6% of the workload is dedicated to didactics, methodologies and teaching practices (Ibidem). Furthermore, the average income of basic education teachers corresponded only to 69.8% of the average salary of other professionals with higher education (Todos pela Educação, 2020).

This paper will focus on primary and lower secondary education. Those levels are not only the basis of learning but also the investment that produces more returns both in terms of equity and economic efficiency, in comparison with more advanced levels of education (Heckman, 2011). In Brazil, elementary education is the primary responsibility of municipal government: they encompass 83.5% of the total public enrolment at that level (Loureiro et al., 2020). Nonetheless, from the 5,570 Brazilian municipalities, around 70% depend on more than 80% of funds that come from sources external to their collection (Canzian, 2019). Besides, 35% do not collect sufficient revenues to even support their administrative structure (Cucolo, 2019). Therefore, those small and impoverished cities often lack the capacity and technical ability to provide a good education service, as educating thousands of children is a complex and challenging task, which involves activities such as curriculum design, teachers training, maintenance and construction of school buildings, learning

material production, hiring of teachers and assessment of learning achievement (Pritchett, 2014).

Given the difficulties the municipalities face to deliver such a primordial public service, the states should play a fundamental role in inducing the improvement of basic education at the municipal network. This paper addresses this issue by analysing the improvement of basic education in the state of Ceará through the perspective of the public integrity theory and how the state Department of Education built integrity via a series of reforms.

1. Public Integrity Theoretical Framework

Public institutional integrity refers to "the robust disposition of a public institution to legitimately pursue its legitimate purpose, to the best of its abilities, consistent with its commitments" and is a fundamental rational element for trust in public institutions and their legitimacy (Kirby, n.d.). When a public institution does not possess integrity, it becomes untrustworthy and lost its legitimacy, i.e., citizens do not see any moral right to rule regarding the institutions. With no legitimacy, institutions lose their power and may eventually collapse.

Therefore, integrity is crucial for building strong institutions and assure citizens that the government is working on their interest, and not just for a select minority (OECD, 2018). Integrity is fundamentally considered a moral issue in how the institutions work; however, its importance goes beyond the abstract perspective, as trust in institutions also has practical implications, affecting, for instance, the efficiency and inclusiveness of government.

It is important to stress that integrity is not only a lack of corruption in an organisation. After all, absence of corruption just entails meeting the very minimum standards of public office (Heywood and Rose, 2015). Moreover, combating corruption is not enough to build trust in government and can be ineffective (Rothstein and Tannenbergh, 2015). In other words, only fighting corruption, although extremely important, limits the government goal to compliance with minimum standards of conduct, whereas delivering effective policies and providing good services to the population are also key elements to build trust, hence integrity, in public institutions.

Due to the limitations of addressing corruption only, the public integrity concept developed by Kirby (2018) considers five key elements an institution must possess to have integrity: purpose, legitimacy, pursuit, consistency with commitments, and robustness. Furthermore, he adopts an "institution-first" approach, in which the integrity of public officers is a function of institutional integrity.

The first vital element an institution must acquire in order to have integrity is a clearly defined **purpose**. Secondly, this purpose must be **legitimate**, which implies that this purpose is worthy of citizens respect. Besides, to pursue that purpose legitimately means that the institution is acting within the limits of its authority. The third aspect of integrity is the **pursuit**, that is, the institution "pursues its purpose to the best of its abilities, given the resources that it has", which demands not only the intention but also significant effort. The fourth element is **consistency with its own commitments** or a strong disposition to meet all the commitments it has made. **Robustness** is the final requirement for integrity: an institution must be able to sustain its integrity in the long run, even when adverse conditions, such as conflicts of interests, arise.

2. Ceará's Public Education: a case of success

The most striking example of success in improving education quality in Brazil happened in the North-eastern state of Ceará, one of the poorest states in the country, with a population of 9 million people.¹ Despite having the 5th lowest GDP per capita among the 26 Brazilian states, municipalities in Ceará, collectively, are ranked 3rd in the Index of Basic Education Development (Índice de Desenvolvimento da Educação Básica - IDEB²) at primary education and 1st at the lower secondary level, as it is displayed in the Figure 1 below.

Figure 1 – IDEB at primary and lower secondary education: municipal networks aggregated by state, 2019

IDEB 2019 - Initial years (5th grade)		IDEB 2019 - Final years (9th grade)	
São Paulo	6,5	Ceará	5,2
Paraná	6,4	São Paulo	5,2
Ceará	6,3	Paraná	5,1
Minas Gerais	6,3	Goiás	5,1
Santa Catarina	6,3	Santa Catarina	4,9
Goiás	6,0	Rondônia	4,8
Espírito Santo	5,9	Acre	4,8
Acre	5,8	Minas Gerais	4,7
R. G. do Sul	5,8	Espírito Santo	4,7
Mato Grosso	5,7	Piauí	4,6
Rondônia	5,5	M. G. do Sul	4,6
Roraima	5,5	Amazonas	4,5
Tocantins	5,5	Tocantins	4,5
M. G. do Sul	5,5	Pernambuco	4,5
Piauí	5,4	Alagoas	4,5
Rio de Janeiro	5,4	R. G. do Sul	4,5
Amazonas	5,3	Mato Grosso	4,5
Alagoas	5,3	Rio de Janeiro	4,4
Pernambuco	5,1	Roraima	4,1
Paraíba	5,0	Maranhão	4,0
Bahia	4,9	Pará	3,9
Maranhão	4,8	Paraíba	3,9
Pará	4,7	Amapá	3,8
Amapá	4,7	Bahia	3,8
R. G. do Norte	4,7	R. G. do Norte	3,6
Sergipe	4,6	Sergipe	3,6

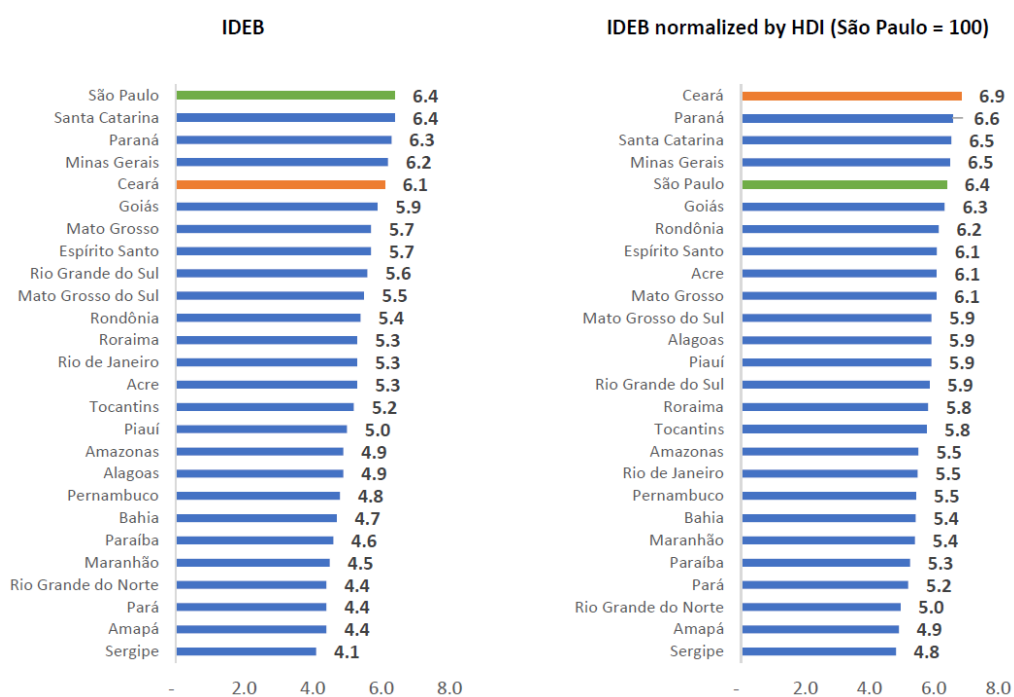
Source: own elaboration, with INEP/MEC data.

¹ Another praised case of improvement in primary education in Brazil is the south-eastern state of Minas Gerais. From 2007 to 2009, Minas Gerais rose from 5th place to 1st place among Brazilian states on Brazil's national (IDEB) assessments. In 2006, only 49% of 8-years-old students knew how to read at the recommended level, while in 2010 this number increased to 86%. Currently, Minas Gerais occupies the 4th position in the IDEB.

² Brazil's national measure of education quality carried out by the Ministry of Education every two years, and that evaluates the performance of students in Portuguese and Math.

The scenario was quite different a few years ago. In 2007, only 1 of the best elementary schools in the country was from Ceará, which occupied the 15th position in the IDEB. Nevertheless, in the last 15 years, several education reforms, aligned with a strong political commitment, lead the way to the most substantial increase in the IDEB in Brazil, in both primary and lower secondary education. What makes this sharp increase in quality even more remarkable is that it was done with limited resources. Indeed, when education quality is controlled for socioeconomic conditions, as measured by the Human Development Index (HDI), Ceará has the best municipal primary and lower secondary system among all Brazilian states (Figure 2).

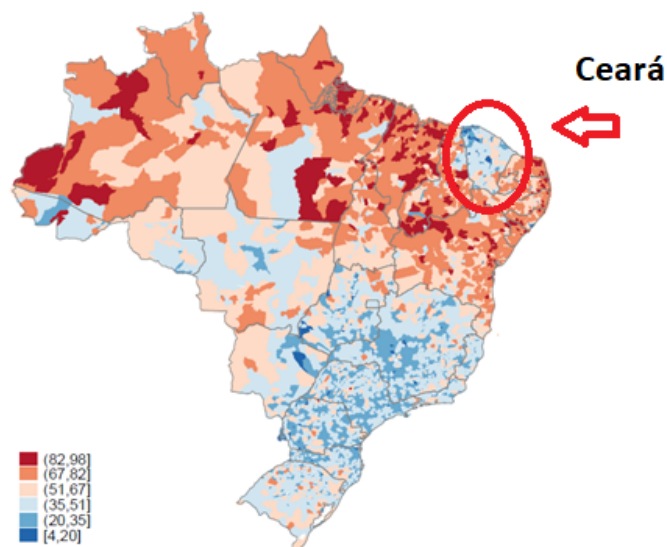
Figure 2 – IDEB at primary education: municipal networks aggregated by state, 2017



Source: World Bank Group – Education, with INEP/MEC data.

Between 2005 and 2017, Ceará had the highest growth of IDEB in the country in primary schools (118%), and the second largest in the lower secondary schools (75%). Furthermore, when compared with other poor states in the Northeast, we can notice that Ceará is an "island of excellence" in the region regarding the learning poverty index, i.e., the proportion of 10-year-olds that cannot read and interpret a simple text or are out of school (Figure 3). The majority of cities located in the North and Northeast regions are in red or orange, which means that more than half of the 10-years-old children there have not the appropriate learning level of Portuguese. Meanwhile, Ceará is the only North-eastern state mostly coloured in blue, like the wealthier states from the South and Southeast.

Figure 3 – Learning poverty for Brazilian municipalities, 2017



Source: World Bank Group – Education, with INEP/MEC data

2.1 Low budget and efficient allocation of resources

According to the Brazilian Constitution, municipalities and states must expend at least 25% of their revenue from taxes and transfers in maintaining and developing education.³ Otherwise, the National Fund for Education Development automatically dispatches a statement to states' Audit Offices and Prosecution Office informing the non-compliance with the law. Therefore, more prosperous states and municipalities automatically possess more resources to invest in education.

In order to diminish the resulting inequality among regions, the national government created the Fund for Maintenance and Development of Basic Education and Valorisation of Education Professionals (Fundeb), which redistributes the resources attached to education, taking into consideration the social-economic development of the regions. The federal government, through the fund, complements what is needed for the most impoverished states and municipalities to achieve the minimum value required to be invested per student each year.

In the absence of Fundeb, the inequality regarding education resources between the systems that most and less invests per student would be of 10.000% (Todos pela Educação, 2020). Even after the redistribution through Fundeb, inequality in relation to education financing remains substantial: around 564%. Municipalities in Ceará, for example, spend less than a third of those located in wealthier states, such as São Paulo, and yet generate high educational outcomes. Considering the average revenue bound to education, Ceará is the 21st state with less revenue per student, with an average of R\$ 3,800 (\$ 705,00) per student enrolled (Ibidem).

³ Brasil, 'CONSTITUIÇÃO DA REPÚBLICA FEDERATIVA DO BRASIL' (Senado.leg.br, 2010) <http://www.senado.leg.br/atividade/const/con1988/con1988_04.02.2010/art_211_.asp> accessed 31 August 2020.

Municipalities' expenditure per student in Ceará is considerably low in comparison to other Brazilian cities, but still, they achieve higher scores in IDEB, which shows a remarkable efficiency in the allocation of resources.

3. Applying the Public Integrity framework

The fundamental rational basis for trust in public institutions is their institutional integrity. Thus, to build or rebuild trust, and hence legitimacy, public institutions need to develop integrity. In this section, I will analyse how the state Department of Education of Ceará built integrity in the last 15 years, considering its five elements: purpose, legitimacy, pursuit, consistency with commitments and robustness.

First, it is necessary to assess the trustworthy aspect. Is the public education institution in Ceará trustworthy? Do the citizens of this state trust their educational system? It is easier to evaluate the presence (or absence) of trust in other public institutions, such as the police, where the number of reports of crimes is used as a measure of confidence in it. Other information often used to measure trust in a public institution is the amount of use of the public service in question.

Nonetheless, attendance in basic education in Brazil is mandatory, which invalidates it as a measure of trust, as students will go to school whether they or their parents trust the education system or not. Besides, attending school is one of the conditions imposed by Bolsa Família, a Brazilian conditional cash transfer programme that covers 40 million people (one fifth of Brazil's population). Thus, an increase in the use of this public service may not be due to the amount of trust in the institution, but rather to the conditionality of Bolsa Família.

Notwithstanding, the public education system in Ceará seems to be trustworthy when we consider some aspects that signalise trust. First, Ceará's public education is well-known throughout the country for its quality and is usually portrayed as a model of success. Recently, the primary vehicles of communication of Brazil, such as Folha de S. Paulo, Estadão and Globo, have published articles about the incredible improvement in the education of the north-eastern state. Examples of headlines are: "Ceará and Sobral have a lot to teach to Brazil and the world about learning"⁴, "Ceará has 10, out of 20, municipalities best evaluated in elementary education, says the World Bank"⁵, and "In education, Brazil has a lot to learn from Ceará"⁶.

Furthermore, the involvement of parents in schooling, by attending school meetings or encouraging their children to go to school, signalises trust in the

⁴<https://www1.folha.uol.com.br/colunas/rafael-munoz/2020/02/ceara-e-sobral-tem-muito-a-ensinar-ao-brasil-e-ao-mundo-sobre-aprendizagem.shtml>

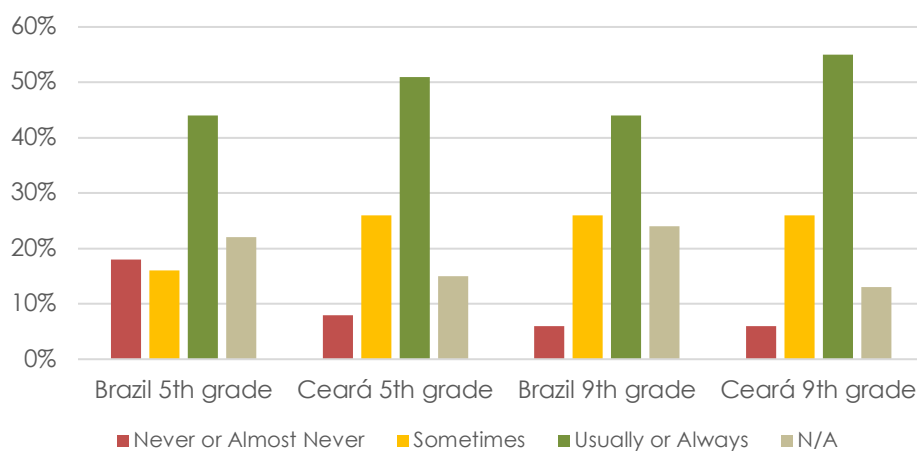
⁵<https://g1.globo.com/ce/ceara/noticia/2020/07/14/ceara-tem-10-dos-20-municipios-mais-bem-avaliados-em-qualidade-do-ensino-fundamental-diz-estudo-do-banco-mundial.ghtml>

⁶<https://politica.estadao.com.br/blogs/fausto-macedo/em-educacao-o-brasil-tem-muito-que-aprender-com-o-ceara/>

education system. It is plausible that parents who trust more the public education institution will attend more school meetings and encourage their children to go to school. To assess this information, I analysed data from Prova Brasil 2017, a survey applied for all the students of the 5th and 9th grade enrolled in elementary schools. From the 114,359 students from Ceará, 51% reported that their parents would "always" or "usually" go to school meetings. Whereas in Brazil this percentage decreases to 44. The difference concerning students from the 9th is slightly larger: 55% of the parents in Ceará always attend meetings, while only 44% of the parents in Brazil attend as much often.

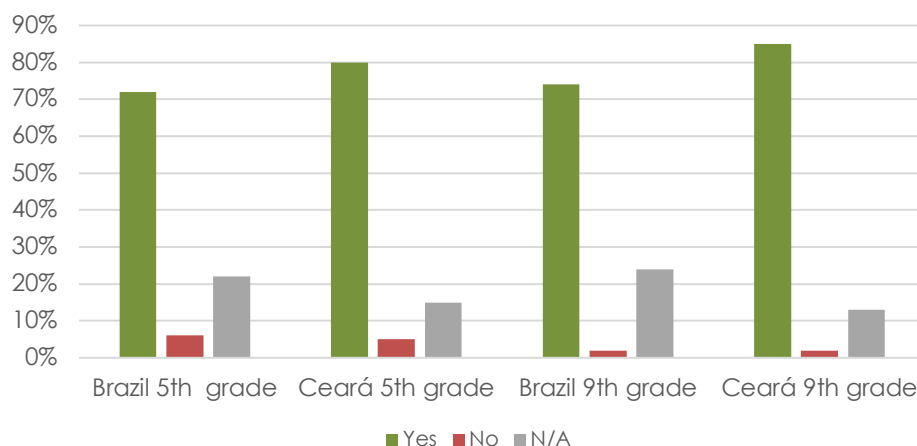
There are considerable differences regarding the encouragement parents give to their children to attend school, too. In Ceará, the vast majority of 9th grade students (85%) answered that their parents encourage them to go to school or not to miss classes. In Brazil, this percentage is 11 points lower: 74%. In short, the recognition of the national mainstream media about the quality of education in Ceará, plus the data that parents at this state are more involved with their children schooling, indicates that the public education institution in Ceará is trustworthy. The data are displayed in the Graphs 1 and 2 below.

Graph 1 – How often parents or guardians attend school meetings



Source: own elaboration, with Prova Brasil 2017 data.

Graph 2 – Encouragement from parents or guardians for their children to attend school



Source: own elaboration, with Prova Brasil 2017 data.

3.1 Purpose of the education institution service

The public integrity theory claims that "in order to have integrity a public institution needs a clearly defined purpose or a set of purposes with clarity about how they are to balance against one another", in contrast with "vague, in tension or unresolved purposes" (Kirby, n.d., p.2).

Most commonly, education institutions have a quite straightforward purpose: educating children and teenagers. According to the Brazilian Constitution, municipalities are the primary responsible entities for elementary schools, while high school is a responsibility of the states. In that sense, the general purpose of most states' department of education is teaching children between 5 and 14 years old. However, one can argue that this purpose may be too broad and vague, hence more challenging to verify progress in the accomplished of the purpose and more difficult to citizens hold the government accountable for it.

In 2007, the government of Ceará established a more precise, clear, and well-defined purpose: achieving literacy for all at grade 2. The new goal was crucial to monitor and guide the education reforms that were going to be implemented. Moreover, it meant that the state was taking the responsibility to lead and coordinate educational changes that would increase education outcomes in the municipal networks, even though elementary education is a primary responsibility of the municipalities.

This was a fundamental step, as the states have an important role in supporting and inducing municipalities to achieve educational goals, even though they are not directly responsible for literacy. Besides, it was crucial to establish cooperation governance between the state government and the municipalities, so that the

actions of a literacy policy were not restricted to just a few localities (Todos pela Educação, 2020).

Furthermore, literacy targets are possible to be achieved in the short-term, which means that politicians can deliver results still in their electoral term. The main reforms in Ceará were implemented in 2007, and outcomes could be observed with the standardised state exams every year, and with the equivalent national exams every two years (Loureiro et al., 2020). This represented a strong incentive to mayors, as they could do political marketing on the improvement in education outcomes during the election and enhances their chances of being reelected. Those quick wins are also important to gain the trust of stakeholders, as they emphasize the seriousness of the reforms (McKinsey & Company, 2010).

From a pedagogical perspective, prioritising literacy was a fundamental first step to give students foundational skills and the basis for further learning (Loureiro, Di Gropello and Arias, 2020). As the literacy goals are being achieved, the state government can now broaden their educational purpose by, for instance, including numeracy and science targets and monitor schools and students' progress on these subjects as well.

3.2 Legitimate purpose

The theoretical public integrity framework states that a legitimate purpose is one worthy of respect from citizens. This means that citizens may disagree that a specific purpose is best for a particular institution; however, they agree that, given who or how that purpose was set, the institution is permitted to have such a purpose (Kirby, n.d.). Also, the institution must pursue that purpose legitimately, otherwise any integrity it might have will be compromised (Kirby, 2018).

The purpose of educating children and teenagers, and more specifically, ensuring that all students are literate at the 2nd grade, is clearly legitimate. Education is a vital public service valued by society, and parents and children directly benefit from it and want it to succeed. Furthermore, literacy allows citizens to read whatever they wish, hence promoting and enabling free thought, a fundamental aspect of democracies. Nevertheless, in Ceará's case, problems regarding legitimacy could have arisen considering that the state was taking responsibility for elementary education, a service that had been assigned to the municipalities in 1995, through the Law No. 12452/95.

In Brazil, the municipality is an autonomous federated entity, with a level of administrative autonomy comparable to the one existent in the states, which implies that they can and should do their own policies, as long as they do not contradict national or state rules. Moreover, the Constitution, in article 211, establishes that municipalities shall act primarily in primary and child education, whilst the states and

the Federal District in primary and secondary school.⁷ Therefore, according to the Law No. 12452/95 and the Constitution, in Ceará, the primary education is the responsibility of the municipals' department of education, including maintenance of schools' buildings, hiring of teachers and principals, and professional training of educators.

Despite this, the purpose of the state Department of Education of achieving literacy for all at the 2nd grade is not illegitimate, as Ceará's decision to take the responsibility to coordinate educational changes was aligned with a commitment to respect the independence of the municipalities. The state government lead educational reforms while also providing a high degree of autonomy for cities to design and implement their education policies. State and municipalities worked in collaboration, in line with the article 211 of the Constitution, which also states that the Federal government, the states, the Federal District and the municipalities shall define forms of collaboration to ensure the universalisation of education. In short, the legitimacy of the purpose was secured because the municipalities autonomy was preserved.

In order to be legitimate, the institution must also pursue the purpose legitimately. In accordance with that principle, the state government sought to ensure equality in access to quality education with mechanisms to encourage the sharing of good practices among schools and municipalities and promote a healthy competitive environment (Loureiro et.al., 2020). Through the programme School 10 (Escola Nota 10), teachers and schools with the best performances received social and financial rewards. However, the full prize was only received if their schools engaged in activities of support to the low-performing ones, such as sharing material, programming new pedagogical activities and organising visits. Besides, low-performing schools also received a reward if they achieved better outcomes in the following year.

Finally, fiscal incentives were given to municipalities that improved their education results (more details in the next section), but the formula penalised cities that increased inequality among schools and students, or had lower attendance in the exams. This strategy enhanced the legitimacy of pursuit, as it discouraged bad practices such as focusing on improving learning for only a subgroup of schools or students (Loureiro et al., 2020).

3.3 Pursuit

According to the public integrity framework, to have integrity, "an institution must pursue its purpose to the best of its abilities, given the resources that it has" (Kirby, n.d., p. 2). Moreover, the efficient pursue requires intention manifested in the

⁷ Brasil, 'CONSTITUIÇÃO DA REPÚBLICA FEDERATIVA DO BRASIL' (Senado.leg.br, 2010)
<http://www.senado.leg.br/atividade/const/con1988/con1988_04.02.2010/art_211_.asp> accessed 31 August 2020.

decision-making of the institution's leadership, and maximal effort, which is displayed in the actions of public officers in the institution (Ibidem).

In the last thirteen years, the education policy of the state of Ceará has witnessed a sharp increase in its efficiency. From 2007 it has been implementing core interventions in the education system, such as the Literacy Programme at the Right Age, that lead to a significant rise in learning outcomes. Given the resources that Ceará had, the government started to pursue its purpose of educating, and more precisely, ensuring literacy, to the best of its abilities, through a comprehensive package of education reforms: a) fiscal incentives for municipalities to improve education results b) technical assistance to municipal schools, and c) autonomy to municipalities and regular monitoring of learning outcomes (Loureiro et al., 2020).

The maximal effort was allocated in those interventions, which resulted in the most substantial increase in the national education quality index in both primary and lower secondary education of the country. It is also worth stressing that Ceará was substantially efficient in the use of its resources: being one of the poorest Brazilian states, it possesses a very limited budget. In fact, in Brazil, the variance in spending across municipalities and states only explains 11% of IDEB performance, which suggests that good management practices, as exemplified by Ceará, play a critical role (Ibidem).

Before the implementation of those reforms, though, a previous fundamental step was required: a firm intention from the local political leadership to improve education in the state (Raiser, 2018). Ceará leaders elected education as a top priority of the public agenda and decided to follow a similar strategy from the municipality of Sobral, a national and regional reference in education⁸. The government enacted learning as the primary goal of the education policy, and then established a package of reforms to achieve the purpose of ensuring literacy for all children by the end of 2nd grade.

a. Fiscal incentives

In Brazil, most states transfer part of the ICMS (Imposto sobre Circulação de Mercadorias e Serviços, or state consumption tax) to the municipalities according to their population size and level of income. In 2007, Ceará approved the state law 14.023/2007, which changed this distribution mechanism, introducing performance in education, health and environment policy in the transfer criteria.⁹ Education outcomes then represented 72% of the discretionary distribution of ICMS, while health accounted for 20%; and environment, 8%.

Therefore, around 18% of the entire allocation of ICMS that a municipality receives is linked to its educational performance, measured, for instance, by student

⁸ In the 2005 IDEB, Sobral did not even appear in the top 1,000 of Brazil's municipalities. Whereas in 2017, it ranked first for both fifth grade and ninth grade (Evans and Loureiro, 2020).

⁹ Brasil, 'Lei N. 14023 DE 17/12/2007 - Estadual - Ceará - Legisweb' (Legisweb.com.br, 2007) <<https://www.legisweb.com.br/legislacao/?id=122702>> accessed 31 August 2020.

learning and progression through grades. As Ceará is an impoverished region, the size of the state consumption tax transfer can account for more than half of all municipal total financial resources at the poorer cities.

This policy was critical to build the political commitment of mayors to improve education. The perspective of acquiring more revenues from the state, which could be allocated in any area of government, and not necessarily in education, created strong incentives for mayors to pursue effective policies, such as a merit-based selection of schools principals and teachers.

Ceará's municipalities are vote-rich, but resource-poor constituencies, where clientelist behaviour such as providing material goods before and after the election, in exchange for political support, is a common practice (Kitschelt, 2000). In that sense, before the law 14.023/2007, education was mainly a source of patronage to politicians in the cities of Ceará. Public sector jobs in lower and mid-level administrative positions were part of the materials goods exchanged for votes and support. Hence, the majority of principal and education secretaries were selected not based on their qualifications and ability to run a school, but rather on political connections or as a political favour (Raiser, 2018; Saavedra, 2019; Loureiro et al., 2020).

The results-based financing changed the incentives in the political game. Local politicians are rational actors whose primary goal is re-election. In the pursuit of this objective, they distribute resources to political allies and deliver public services or material goods to the population, expecting to be rewarded with votes when the election comes. The reform in ICMS transfer affected the rational calculation mayors do in their quest for re-election, by diminishing the benefits of patronage in comparison to the potential financial rewards that would come with better education outcomes.

As a result of the strong incentive to improve education, mayors started to appoint school principals, teachers and secretariats of education following more technical criteria, instead of political ones. The fiscal incentives for municipalities were crucial to create the *intention* of mayors to, in fact, seek effective education policies, instead of using resources from education as a source of political bargain and patronage.

It is worth noting that the selection process of principals in the municipalities of Ceará remains majoritarian by appointment: 56%¹⁰. Appointments combined with a selection process represents 12%. Meanwhile, methods that are usually more associated with meritocracy, such as selective processes or selective process combined with an election, accounts for 23% only.

However, selection by appointment does not necessarily mean political-based criteria and bad schools principals and teachers. In an institutional

¹⁰ Data from Prova Brasil Questionnaire on 3880 Principals, 2017.

environment where selection is discretionary, *how* discretion is used is vital (Voth and Xu, 2019). It can be used to "propitious" patronage: when personal ties are used as a second-best solution to the problem of identify talents and resolve information asymmetries (Ibidem). Politicians who are interested in improving education can use their discretion to appoint suitable professionals, use their ties to diminish the problem of asymmetric information and choose professionals more prepared to deal with the challenges that specific education system faces. On the other hand, entrance examinations might have little connection to subsequent ability to run a school or teach, as the quality of the service provided is a "thick activity," i.e., requires detailed adaptation to a specific case and is based on complex information which is difficult to assess (Pritchett, 2014).

In Ceará's case, evidence suggests that there was a decrease of 14.3% in the selection of principals on a political basis after the fiscal incentives reform (Loureiro et al., 2020). Principals became more experienced, either in years in education or the time spent in the same school. They also have been receiving 16% more continuous training than their counterparts at the border between Ceará and adjacent states, and report 16% more that the training was useful for daily work. However, they do not have significantly more Master or PhD degrees. The authors found similar results for teachers: differences regarding master's and specialisation were insignificant, but they had received more continuous training. Finally, principals in the municipalities of Ceará reported receiving pedagogical projects from the municipal administration 30% more often than principals in schools across the border.

It is worth highlighting that this paper is not advocating for non-merit-based selection of principals and teachers, nor patronage. It is simply pointing out that the right incentives can promote better selection criteria of educational professionals, even if not by the traditional merit-based methods such as public tender and election. In that sense, we avoid advocating for a "best practice" solution that works in other settings, but that could face political backlash in this context (Woolcock, Pritchett and Andrews, 2017).

Key political actors, such as the head of the state Department of Education, could veto a radical change in the selection process, as s/he would lose the power that comes with the appointment of principals. Introducing the right incentives, though, can be a second-best solution to a more technically based appointment. In the case of Ceará, the results-based financing was critical to set education as the top priority for mayors, who then had strong incentives to select principals following a technical, and not political, criteria.

b. Technical assistance to municipal schools

Another vital intervention that reflected the government pursuing its purpose to the best of its abilities was the Right Age Literacy Programme (PAIC¹¹) combined with the technical support to municipal secretariats of education.

This programme became a national reference in terms of collaboration between state and municipal governments (Vieira, Plank and Vidal, 2019). The Department of Education of Ceará established education outcome targets in agreement with the city governments and provided fundamental support for them to achieve their goals. The technical assistance included teacher training focused on classroom practice, production of scripted learning materials, workshops for primary teachers, school visits, sharing of best practices, application of a standardised student learning assessment, rewards to top schools and more assistance to the low-performing ones (Loureiro et al., 2020). The focus was on improving the effectiveness of teaching and supporting and valuing teachers' work (Saavedra, 2019).

The technical assistance supplied was essential to help the municipalities with less capacity to deliver public services, hence promoting equity in the increase of the education quality among all the towns of Ceará. Providing quality education to children is a complex and challenging task, in which small and impoverished cities might not have the technical ability to do so by themselves. Therefore, not only financial assistance through the fiscal incentives but also the technical support from the state Department of Education was essential to enable the increase in education outcomes throughout the state. Otherwise, some municipalities could have become discouraged and lagged behind, which would have a negative impact on equity and on the overall benefits of the educational reforms (Loureiro et al., 2020).

The Right Age Literacy Programme focused on support to teachers and the teacher-learning process, and evidence suggests that the main determinant for learning is the quality of teachers and not, for example, class size reduction. Of 112 studies conducted in OECD countries about the subject, all showed that variation in teacher quality dominated any effect of smaller classes (McKinsey & Company, 2007). The studies also point out that reducing classes generates less money per teacher if the funds are kept at the same level. Plus, as the system will need more teachers to have smaller classes, it would become less selective about who could become a teacher.

c. Autonomy to municipalities and regular monitoring

Besides the RBF and technical assistance strategies, Ceará's effort to improve education included a high degree of autonomy to municipalities, combined with a robust monitoring system. Municipal secretariats of education were free to design and implement policies regarding elementary schools. This decentralisation was

¹¹ Programa Alfabetização na Idade Certa.

important not only to ensure the legitimacy of the educational reforms, as outlined in section 3.2, but also to promote efficiency, as decentralisation is in general associated with better public services, higher government responsiveness and more accountability (Speer, 2012). When services are administered locally, it is easier for citizens to hold politicians accountable and for the policymakers to identify citizen's preferences and deliver services that fit local needs (Ibidem).

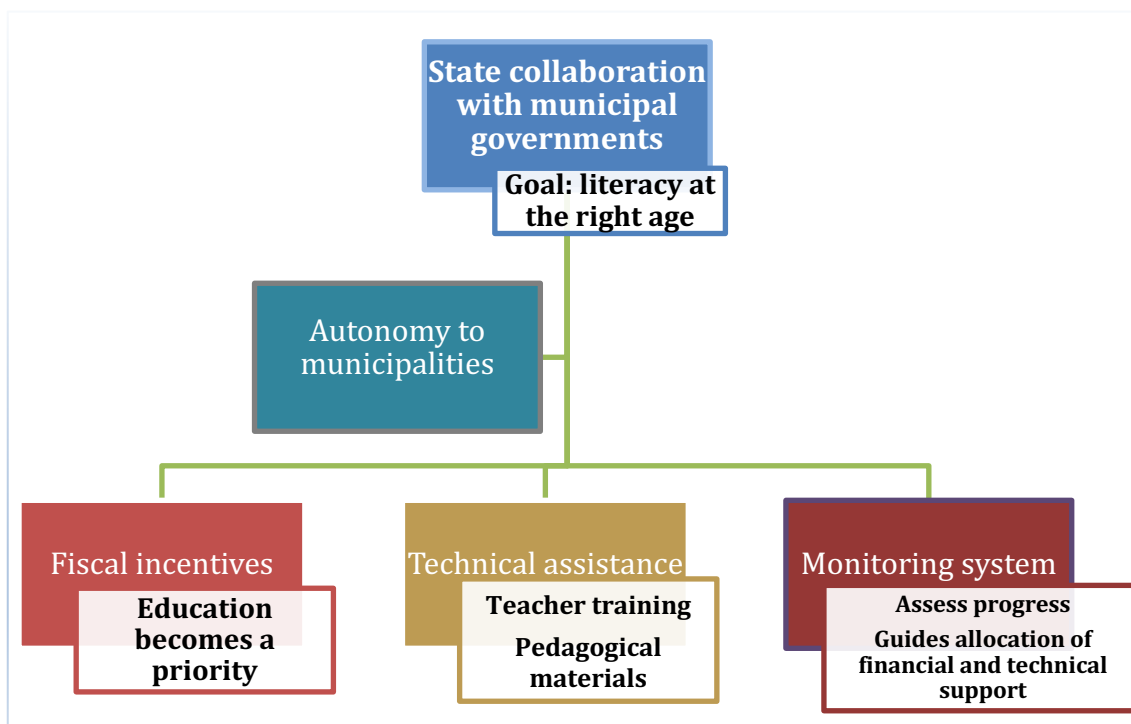
In contrast, some advocates of the federalisation of basic schooling, as proposed on the bill PLS 337/2016¹², argue that schools run by the federal government have better performance. They do present higher outcomes, but because the small size of the network – only 47 elementary schools and 22 thousand students – facilitates management and produces a selection bias. As the demand is high, in order to enrol in federal schools, students have to be part of a competitive selection process, and the best ones are selected. If elementary schools were federalised, this “small size advantage” would disappear, as there are more than 100,000 municipal and state schools in the country, with more than 20 million students enrolled.

In addition, teaching and the operation of schools are activities that do not possess economies of scale, so centralisation, and the consequent bureaucratisation, is inefficient. Actually, learning and teacher-student interaction are complex activities that require adaptation to individual students, so providing autonomy to teachers and schools is critical to improve education.

The Department of Education of Ceará, in partnership with municipalities, also established a reliable monitoring and evaluation system with clear indicators to measure learning outcomes. This was fundamental to assess if the primary goal of literacy for all by the 2nd grade was being achieved and identifying the municipalities that needed more technical assistance from the state. Furthermore, the robust monitoring and accountability system provided the necessary data about whether the reforms were being successful and guided further actions. (Saavedra, 2019). The basic strategy adopted by the Department of Education in pursue of improving learning outcomes is summarised in Figure 4.

¹² Agência Senado, 'PLS 337/2016 - Senado Federal' (Www25.senado.leg.br, 2020) <<https://www25.senado.leg.br/web/atividade/materias/-/materia/126890>> accessed 31 August 2020.

Figure 4: Strategy of Ceará's Department of Education



Source: own elaboration.

Despite having the best primary and second best lower secondary education, the average level of learning at the upper secondary education is fairly low in Ceará (3.8 out of 10). Even with such a low score, the north-eastern state is on 6th position in IDEB at this level, which reflects how the country as a whole have to improve upper secondary education. Therefore, the next step to strengthen integrity in the state Department of Education would be to efficiently pursue increasing learning outcomes at the upper secondary level as well. By improving the last stage of schooling, Ceará's society can witness a sharp rise in the gains of a quality education, such as more labour productivity, economic growth, higher incomes and less crime.

3.4 Consistency with commitments

Public institutions make several commitments to pursue their purpose and operate within the constraints of legitimacy (Kirby, 2018). They also make commitments to particular stakeholders and promises to specific communities. In order to be trustworthy, an institution needs to have a strong will to meet all the commitments made. Moreover, the public institution must not only comply with its internal rules but also have mechanisms to guarantee that those rules continue to be fit for its purpose, so that no inconsistency arises (Ibidem).

The main commitment the government of Ceará made was to keep politics out of school. The political leadership explicitly set education as a top priority in the public agenda and made the critical decision to prevent politics from meddling in decisions regarding education policy (Saavedra, 2019). Thus, the technical support provided by the states to the municipalities struggling to achieve their learning targets was not be influenced by the political alliance of the respective mayors.

And in fact, there is evidence of equal treatment received by the state between mayors of the opposition and the governor's allies. In the last years, municipalities that were aligned with the party of the governor received the same benefits and assistance as those in the opposition (Evans and Loureiro, 2020). Besides, as a consequence of the fiscal incentives from the state government, mayors also started to keep politics and education policies apart, by selecting school principals and secretariats of education more according to technical criteria.

3.5 Robustness

The final aspect of integrity is robustness: the public institution must be able to keep its integrity even in adverse environmental conditions. In other words, it needs to have sufficient strength to have integrity across time and circumstance (Kirby, n.d.).

There are a few features that indicate robustness at the state department of education of Ceará. First, there is a culture of collaboration between the state and municipalities, which has been gradually established since 1995, with the approval of the Law No. 12452/95 (which made municipalities responsible for elementary education), and the transfer of resources by the state to the cities (Vieira, Plank and Vidal, 2019). During this period, the state and its municipalities have signed many technical and financial agreements, irrespectively of partisan political interests (ibidem). Moreover, municipalities' autonomy regarding their education policy, a fundamental element of legitimacy, is protected by this same law.

Secondly, the state Law 14.023/2007 implemented the performance-based distribution of the state tax consumption (ICMS), with education outcomes as the primary component of the formula. Therefore, the fiscal incentives strategy, that has been in place since 2007, is also institutionalised, and hence more difficult to change.

Overall, though, it is hard to assess the level of robustness in the Department of Education of Ceará, since there has not been yet a change in the ruling coalition since 2007 – the year the reforms started. A key feature that might be compromised with a change in power is the governor's commitment to equal treatment to municipalities, irrespectively of the mayor's party, in terms of financial and technical support.

Notwithstanding, by 2023, when another coalition might come into power, the education package will have been in place, and with positive results, for 15 years,

which may give some stability to it. Furthermore, Ceará's education is well known throughout the country as case of success. Thus, the time factor plus the status of national role model, may enhance the robustness of the education system, as it would be politically unwise to deteriorate such a praised policy. On a final note, the current coronavirus crisis will be an opportunity to verify the robustness of the institution, as it has been causing a substantial decrease in the government budget.

Table 1 – Framework of Integrity applied to Ceará's Department of Education

Elements of institutional integrity	Integrity of Ceará's Department of Education
Purpose: the institution has a clearly defined purpose.	Purpose: achieving literacy for all students at grade 2
Legitimacy of purpose: the purpose is worthy of citizen's respect and the institution acts within the limits of its authority.	Sources of legitimacy: <ul style="list-style-type: none"> • autonomy to municipalities • mechanisms to promote equality among cities, schools, and students
Pursuit: the institution pursues its purpose to the best of its abilities, given the resources that it has.	Pursued reforms: <ul style="list-style-type: none"> • ICMS distribution aligned with educational performance • Technical assistance to municipal schools • Robust monitoring system
Consistency with its own commitments: strong disposition to meet its commitments.	Commitment met: <ul style="list-style-type: none"> • Independence of educational decisions from politics
Robustness: the institution can sustain integrity in the long run.	Sources of robustness: <ul style="list-style-type: none"> • Law No. 12452/95 • Law No. 14.023/2007 • Time factor • Status of national role model in education

Source: own elaboration.

4. Policy recommendations

This paper analysed the changes at the Department of Education in Ceará through the perspective of the public integrity framework. It showed how integrity was built regarding the 5 elements of integrity – purpose, legitimacy, efficient pursue, commitment and robustness - in the last 13 years. It is worth noting that, despite all the improvements, this paper is not stating that the public education institution in the

north-eastern state is flawless or free from corruption. Notwithstanding, we argued that Ceará was able to develop integrity in its educational department through a strong political commitment and a comprehensive package of reforms. Drawing insights from this successful case, this final section provides policy recommendations that can be adopted in other settings, especially in other Brazilian states.

- 1. Giving the right incentives to decision-makers so education becomes a top priority in the public agenda.** Reforms have a much higher probability of happening and succeed if the main decision-makers have a real interest on it. Therefore, it is crucial that politicians see improving education outcomes as politically advantageous, either through increasing the public resources available to them, either by creating opportunities to gain political support. In both options, their chances of being re-elected in the near future is enhanced. Ceará's strategy was to give fiscal incentives by align the distribution of state consumption tax with education performance. As a result, mayors became interested in promoting learning, as it would increase the municipality budget. Other states can adopt similar strategies, being mindful of possible adaptations that may be required regarding each state tax distribution system. It is also worth noting that other financial incentives might be more suitable to different contexts. Linking state consumption tax to performance is only one form to create political incentives. The fundamental takeaway is the importance of making improving education politically advantageous, and policymakers must seek alternatives that fits their political and fiscal context. Also, it is crucial that the political leadership clearly communicates the government commitment to education and set a continuous and transparent dialogue with all relevant stakeholders.
- 2. Introducing a robust monitoring system combined with clear proficiency targets, to assess progress, promote equality, and guide the allocation of financial resources and technical support.** There is scientific evidence that best performing schools are those that establish learning goals and use data to monitor the students' learning throughout the year (Ferraz, 2018). Detailed data is also essential to inform which schools are more in need of support from the state.
- 3. Ensuring autonomy to local authorities regarding the formulation and implementation of education policy.** Simply replicating a practice that have worked in a particular region may not have the same results in other settings, as different education networks face different challenges. Thus, local actors must have sufficient autonomy in order to pursue innovative solutions that fit their specific context. In that sense, the decentralisation of public services is usually associated with better government outcomes and more accountability.

In Brazil, securing autonomy to municipalities is also relevant in terms of legitimacy. In the country, elementary education is the main responsibility of municipalities, and municipal governments have 83.5% of the total public enrolment in primary education (Evans and Loureiro, 2020).

- 4. Encouraging the sharing of good practices to simultaneously raise overall outcomes while reducing performance variation across schools and socioeconomic groups.** The transfer of resources to the best performing schools and cities should be conditional to the share of material, pedagogical activities, and visits to the least performing ones. Also, fewer funds should be transferred to school and municipalities with high inequality in learning outcomes.
- 5. Providing technical support, focusing on enhancing the effectiveness of teaching.** Financial support is not enough to foster a collectively increase in education outcomes, especially in impoverished cities with low capacity. Thus, the state should create a special teacher training centre, which will be dedicated to mentorship, teaching practices and methodologies to achieve learning objectives. Moreover, the state should give support in logistic activities, such as production of pedagogical material, maintenance of school facilities, and assessment of learning achievement.
- 6. Valuing the teacher's profession.** Teachers are the key component for a quality education. Therefore, supporting and motivating them is essential. Financial and symbolic awards should be given to the best-performing teachers. Also, states should raise their initial salary and restructure teaching career, with a strict selection process, to attract talented professionals. Finally, a culture of "valuing the primary teacher", through campaigns in partnership with high-valued organisations and leaders in the local community, should be promoted.

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