

Technical Assistance for Local Governments to Improve Education

**Outcomes** 

AN IMPLEMENTATION GUIDE INSPIRED BY THE CASE OF CEARÁ, BRAZIL

### TECHNICAL ASSISTANCE FOR LOCAL GOVERNMENTS

### TO IMPROVE EDUCATION OUTCOMES:

An Implementation Guide Inspired by the Case of Ceará, Brazil

This document presents a detailed implementation guide for a Technical Assistance (TA) system for improving education outcomes, inspired by the successful case of the state of Ceará in Brazil, which achieved universal literacy. The document provides concrete steps for governments that are willing to establish a TA system for subnational governments to improve education outcomes with a focus on learning.

This document was prepared by André Loureiro, Fátima Alves, Louisee Cruz, Matheus Assunção, and Thiago Cardoso in the context of the REACH Trust Fund: Supporting Education Systems to Replicate the Brazil - Ceará Results-Based Financing Model to Reduce Learning Poverty.

### **ACKNOWLEDGEMENTS**

The authors would like to thank the invaluable exchange and collaboration with the state secretary of education of Ceara and the municipal governments that make the Ceará model of education a success, particularly the municipalities of Sobral, Quixeramobim, Ararendá, Milhã, Coreaú e Dep. Irapuan Pinheiro. A special thanks also to Lemann Foundation, Bem Comum Association, Natura Institute and Movimento Colabora, as well as to several World Bank colleagues, including Reema Nayar, Victoria Levin, Julia Liberman, Michael Crawford, Ezequiel Molina, Diego Bazaldua and Halsey Rogers for comments and suggestions. This work is sponsored by the Results in Education for All Children (REACH) Trust Fund.

### TABLE OF CONTENT

| 1  -  A successful example of technical assistance to local governme | ents      |
|--|-----------|
| to improve education quality: The case of Ceará in Brazil            | 6         |
| 2 — The technical assistance framework for municipal                 |           |
| secretariats of education in Ceará                                   | 10        |
| 3 — Laying the groundwork  | 15        |
| 4 — Implementation Roadmap   | 19        |
| STAGE 1  | 19        |
| 1.1 — Establish a learning assessment to                             |           |
| guide the intervention   | 20        |
| 1.2 — Conduct a broad evidence-based                                 |           |
| diagnostic of the education system                                   | 20        |
| 1.3 — Define and communicate targets                                 | 23        |
| STAGE 2  | 24        |
| 2.1 — Design structured materials using the                          |           |
| literacy assessment results  | 24        |
| 2.2 — Develop a teacher and school management                        |           |
| training program   | <b>25</b> |
| 2.3 — Develop an incentive mechanism with high and                   |           |
| low performance schools working together                             | 26        |
| 2.4 — Create initiatives to foster reading                           | 27        |
| 2.5 — Organize an ECE Expansion Plan                                 | 28        |
| STAGE 3  | 29        |
| 3.1 — Distribute the structured materials                            | 29        |
| 3.2 — Train regional and local teams to conduct                      |           |
| teacher and school management training                               | <b>30</b> |

|   | 3.3 — Conduct the classroom assessment                          | <b>32</b> |  |  |  |  |  |
|---|---|-----------|--|--|--|--|--|
|   | 3.4 — Implement the monitoring tools                            | 32        |  |  |  |  |  |
|   | 3.5 — Foster innovation at local levels                         | 33        |  |  |  |  |  |
| STAGE 4   |   |           |  |  |  |  |  |
|   | 4.1 — Conduct a standardized learning assessment                |           |  |  |  |  |  |
|   | 4.2 — Reward best performers and support                        |           |  |  |  |  |  |
|   | those lagging behind  | 36        |  |  |  |  |  |
|   | 4.3 — Analyze literacy outcomes                                 | 36        |  |  |  |  |  |
| 5 — Implementing the model in different contexts 39 |   |           |  |  |  |  |  |
| 5.1.  | What if the student learning assessment system is not           |           |  |  |  |  |  |
|   | consolidated or does not exist?                                 | 39        |  |  |  |  |  |
| 5.2   | . What if there is no monitoring and                            |           |  |  |  |  |  |
|   | evaluation system in place?                                     | 39        |  |  |  |  |  |
| 5.3   | 5.3. What if the curriculum is not updated or well-established? |           |  |  |  |  |  |
| 5.4   | 5.4. What if the supply chain for the printing and              |           |  |  |  |  |  |
|   | distribution of learning materials is limited?                  | 40        |  |  |  |  |  |
| 5.5   | . What if there is diversity in language in the region?         | 41        |  |  |  |  |  |
| 5.6   | . What if there is limited decentralization or little financial |           |  |  |  |  |  |
|   | autonomy at local level?  | 41        |  |  |  |  |  |
| 6 — Fund  | damental aspects of policy continuity                           | 43        |  |  |  |  |  |

 $01 - - 02 \cdot 03 \cdot 04 \cdot 05 \cdot 06$ 

A SUCCESSFUL EXAMPLE
OF TECHNICAL ASSISTANCE
TO LOCAL GOVERNMENTS
TO IMPROVE EDUCATION
QUALITY: THE CASE
OF CEARÁ IN BRAZIL

# 1 — A SUCCESSFUL EXAMPLE OF TECHNICAL ASSISTANCE TO LOCAL GOVERNMENTS TO IMPROVE EDUCATION QUALITY: THE CASE OF CEARÁ IN BRAZIL

The state of Ceará, Brazil, transformed its education system and is currently among the top performers in the country, despite the state's low socioeconomic status. Ceará is a poor state with around 9 million people, roughly the size of Austria or Papua New Guinea. It is the fifth poorest of Brazil's 26 states. Yet, Ceará has seen the largest increase in its national education quality index in both primary and lower secondary education since 2005, with 10 municipalities among the top 20 in the national ranking. A set of education reforms initiated in 2007 led the state to occupy fourth place among all Brazilian states in the national ranking of education quality in lower secondary education and sixth place in primary education.

A key driver of success in Ceará was technical assistance (TA) to the state's municipalities. In 2007, the Ceará government established the 'Achieving Literacy at the Right Age Program' (Programa de Alfabetização na Idade Certa, PAIC), which set out a clear goal: all students in public schools should read by the end of grade 2 (age 7). Unlike most states in Brazil at that time, the large majority of primary students in Ceará were already enrolled in public schools run by their municipal government<sup>1</sup>. To achieve PAIC's goal, the state government provided substantial technical support to the 184 municipalities of Ceará. Municipal education secretariats receive structured learning materials that provide a clear routine for classes and prioritize basic skills, especially literacy, in the early grades. Teachers receive regular training on the use of those materials, including classroom observation and feedback. Low-performing municipalities get additional support. The state also provides budget and curriculum support for early childhood education (ECE) to ensure that children get started right. The state provides training and materials to help municipal education secretariats increase teaching time in classes, adopt meritocratic criteria for the selection of school principals, and to provide incentives—financial and non-financial—for teachers whose students are meeting literacy targets.

Ceará put learning at the center of its education strategy, with early literacy as the foundation. The Ceará government adopted a supervisory role in basic education—a very proactive approach for a state government in Brazil. In addition to TA, it established incentives for municipalities to achieve education outcomes, accelerated the decentralization of the management of lower secondary schools to municipal governments, and established regular monitoring of learning along with accountability actions. At the heart

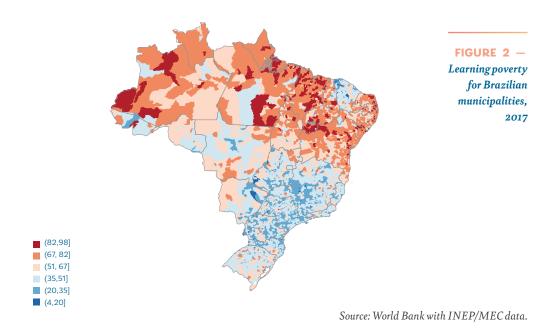
<sup>1</sup> In the following years, many state governments followed that trend and accelerated the process of devolving public primary schools to municipal administrations. As of 2018, all states have the majority of primary education students enrolled in municipal schools, and in many states this percentage is close to 100%.

in Ceará

of this series of reforms was sustained political leadership and focus.<sup>2</sup>



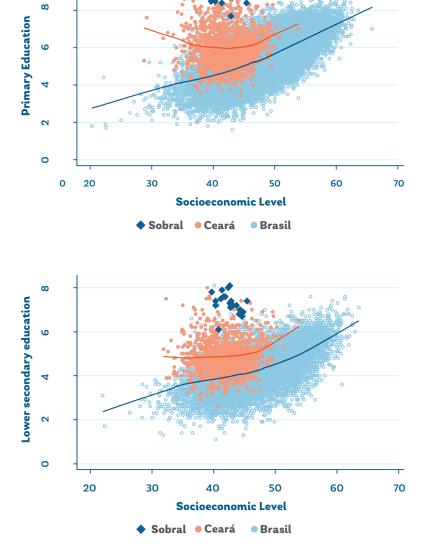
**Learning is the main driver of improvements in education quality observed in the Ceará municipalities.** The top education quality performers in Ceará, according to the national education quality index (IDEB),<sup>3</sup> are also among those with the greatest improvements in the learning component of the IDEB between 2005 and 2017. Improvements in education quality in Ceará can also be observed in the learning poverty index, as there are decreases in the proportion of 10-year-olds who cannot read and interpret a simple text or who are out of school (figure 2).



<sup>2</sup> For more details on the implementation of a results-based financing mechanism in education, see the companion guide: Holanda, M.; Barbosa, M., Cruz, L.; Loureiro, A. Implementing a Results-Based Financing Mechanism for Subnational Governments to Improve Education Outcomes: an Implementation Guide Inspired by the Case of Ceará, Brazil, World Bank, 2020. http://documents1.worldbank.org/curated/en/561471606111232725/pdf/ Implementing-a-Results-Based-Financing-Mechanism-for-Subnational-Governments-to-Improve-Education-Outcomes-An-Implementation-Guide-Inspired-by-the-Case-of-Ceara-Brazil.pdf

<sup>3</sup> Índice de Desenvolvimento da Educação Básica (IDEB) is composed of student learning scores and school progression rates in Portuguese and mathematics.

**Education outcomes for schools in Ceará are substantially higher than expected when considering their socioeconomic context.** The distributions of IDEB scores for municipal schools with different socioeconomic conditions, measured by the national socioeconomic index (INSE), are presented in Figure 3, highlighting the schools in Ceará municipalities that have the highest levels of IDEB in both primary and lower secondary education. All schools in Ceará have low levels of socioeconomic development, and most are in the upper half of the distribution of IDEB scores. A deeper look at the top 20 municipalities in Brazil with regard to IDEB in primary education reveals that all 10 Ceará municipalities in the list are lower on the school socioeconomic index than all other municipalities in the southern states of Brazil.<sup>4</sup>



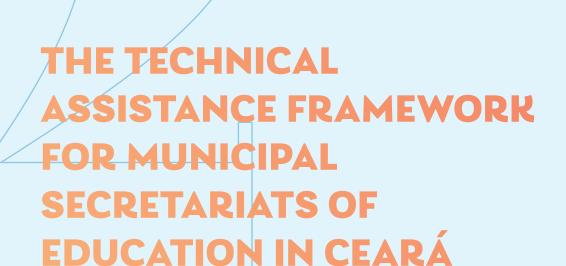
9

FIGURE 3 —
Education
quality measured
by IDEB (2017)
vs. socioeconomic
status (INSE,
2015) - municipal
schools - primary
and lower
secondary
education

Source: World Bank with INEP/MEC data

<sup>4</sup> With the exception of Coruripe in Alagoas. For more information on how Ceará improved its education outcomes, see: Loureiro, Cruz, Lautharte, and Evans. The State of Ceará in Brazil is a Role Model for Reducing Learning Poverty, World Bank, 2020. https://openknowledge.worldbank.org/handle/10986/34156

01 • 02 ----- $-03 \cdot 04 \cdot 05 \cdot 06$ 



# 2 — THE TECHNICAL ASSISTANCE FRAMEWORK FOR MUNICIPAL SECRETARIATS OF EDUCATION IN CEARÁ

A key pillar of the PAIC in Ceará is technical assistance for the municipal secretariats of education. The technical assistance (TA) in Ceará for municipal secretariats of education takes place in a context in which the Brazilian constitution establishes responsibility for different levels of education for each of the three levels of government. The provision of public early childhood education, primary education (grades 1 to 5), and lower secondary education (grades 6 to 9) are assigned to be the responsibility of municipal governments, while public upper-secondary education (grades 10 to 12) is provided by state governments. The federal government focuses on tertiary education but provides supplementary support to pre-university education and establishes the national norms for education at all levels. State governments have a role in the coordination of education policies for their municipalities.

### The technical assistance provided by the Ceará state government to the municipal secretariats of education has three main components:

- 1. Providing literacy support to the municipalities;
- 2. Strengthening the governance of municipal secretariats of education and providing incentives to promote the exchange of best pedagogical practices;
- 3. Promoting the pedagogical use of student assessment results.

Each of the components of the technical assistance for municipal secretariats of education in Ceará is described in Figure 4 and Table 1.

### LITERACY SUPPORT **STRENGTHENING GOVERNANCE AND CREATING INCENTIVES** 1.1 – Designing scripted learning materials 1.2 - Providing direct support to support and train local teams establish teacher training on literacy 1.3 - Creating activities to foster reading 1.4 - Giving support practices among school systems to expand and improve the quality of early childhood education (ECE) PEDAGOGICAL USE OF STUDENT ASSESSMENT RESULTS

FIGURE 4 — Components and Subcomponents of the Technical Assistance for Municipal Secretariats of Education in Ceará

- 3.1 Providing financial and technical support for the implementation of local learning assessments
- implementation of local learning assessments
  3.2 Training at local and school levels to allow a
  systematic use of assessment results

### TABLE 1 -

Components and
Subcomponents
of the Technical
Assistance
for Municipal
Secretariats
of Education
in Ceará

### 1. Providing literacy support to the municipalities

Scripted learning materials

The state government provides municipalities with structured literacy booklets, especially for resource-constrained municipalities. These materials present concrete guidance for the use of time and the indicated activities, with a clear pedagogical routine proposed for each class. The materials are aligned with the state curriculum, which has a clear learning sequence prioritizing foundational skills, particularly literacy at the right age.

Support for municipal teacher training focused on learning materials and classroom practice

Municipal secretariats of education receive training to improve the use of resources. State tutors conduct regular training for a group of technical personnel from municipalities to strengthen their teacher training activities. In municipalities with critically low literacy levels, the state trains the teachers directly. Teacher training is focused on the use of the structured material and the classroom routine and practices, rather than theoretical knowledge. These actions also involve classroom observations by teacher trainers and are based on the booklets that teachers use as part of their daily routine.

Activities to foster reading

The state government encourages municipalities to carry out activities to develop reading skills. These activities include the establishment of a small library for students and teachers in each classroom and a magazine to share best practices among teachers to foster reading outside of school.

Support to expand and improve early childhood education (ECE) The state provides guidance for municipalities to develop a curriculum focused on school readiness and age-appropriate development. The state team offers training for teachers and administrative staff to develop an appropriate pedagogical curriculum for ECE and co-finances the construction of ECE centers.

2. Strengthening the governance of municipal secretariats of education and providing incentives to promote the exchange of best pedagogical practices

Implementing central governance to support and train municipal teams The state government implements a collaborative governance arrangement with solid monitoring and evaluation of municipal education policies. This governance is structured in three levels: 1) State level coordination, responsible for engaging political leaders in each municipality and monitoring and supporting regional teams. 2) Regional teams that support and monitor municipal education departments in management, pedagogical, and training aspects. 3) Municipal teams, responsible for training teachers and principals in their schools, monitoring learning targets, and supporting the implementation of ECE.

Strengthening municipal pedagogical management The municipal secretaries of education gradually gain expertise in learning monitoring and pedagogical management. TA aims to strengthen municipal capacity to implement and monitor a structured literacy policy with solid pedagogical management. The state government designs monitoring indicators and instruments to support schools and municipalities. School leaders regularly monitor student performance, especially in reading; attendance of students, teachers, and school staff; the number of books read by students; the use of structured material; and compliance with the school days established by law. At the municipal education department, TA promotes the structuring of processes in the following topics: elimination of multi-grade classes; effective use of the pedagogical time and the school year; strengthening school autonomy; incentives for teachers of literacy classes; the adoption of meritocratic criteria for selecting school principals.

Providing incentives for exchanging best practices among school networks The state government establishes incentives for exchanging good practices in pedagogical management and fosters healthy competition. At the end of every year, the Escola Nota 10 Prize is awarded to the best-performing teachers and their schools receive financial and social rewards. To fully receive the prize, high-performing schools need to assist low-performing schools over the course of one year. If the low-performing school improves its performance in the following year, it also receives a prize. This strategy fosters the exchange of practices between teachers and school leaders and stimulates all players at the school level.

### 3. Promoting the pedagogical use of the results of student assessments

Providing financial and technical support for the implementation of municipal learning assessments

Municipalities receive assistance to implement a learning diagnostic for each student at the beginning of the school year. The state prepares a diagnostic exam in Language and Mathematics and protocols for applying it, in addition to providing a digital platform to input exam answers. Municipalities are responsible for exam printing, implementation, and data entry. The platform displays a detailed learning diagnostic of students' skills, including their previous knowledge in Mathematics and Portuguese. Results are disaggregated by class and student and guide teacher training.

Establishing a standardized literacy exam for grade 2

The state government established a yearly standardized literacy exam (called SPAECE-Alfa) that assesses all students in grade 2.

At the end of the school year, all grade 2 students take a literacy exam that provides municipalities with information about each student's learning. This standardized assessment is also key for incentive mechanisms established in Ceará (the distribution of ICMS revenues among municipalities and the school prize Escola Nota 10).

Training municipalities and schools on the systematic use of assessment results

Conducting learning evaluations regularly is an effective way to monitor learning and a powerful pedagogical instrument to guide teachers' practice. The TA provides municipalities with the instruments to apply learning evaluations regularly and the training to make pedagogical use of these assessments. Systematic training aims to improve data analysis skills among educational teams and promote the intense and growing involvement of education actors in monitoring student learning.

### **BOX 1: A BRIEF HISTORY OF PAIC**

An assessment of literacy skills in some municipalities in Ceará revealed the need for a systematic approach to achieve universal literacy. In 2001, the city of Sobral conducted a learning evaluation that showed that most of its students, even at the end of primary education, were unable to read. This triggered a series of education reforms in the city, including structured pedagogy, teacher professional development, and monitoring of student learning. The experience of Sobral encouraged the State Legislative Assembly to create the Ceará Committee for the Elimination of School Illiteracy in 2004. The Committee conducted a literacy assessment in other municipalities, which found results similar to Sobral. This led to the establishment of a pilot TA program in 56 municipalities between 2005 and 2006. The program was implemented in partnership with UNICEF, the state section of the National Union of Municipal Secretaries of Education (UNDIME) and the association of mayors in Ceará (APRECE). In 2007, the new state administration took over the implementation of the program, expanding it to the whole state.

 $01 \cdot 02 \cdot 03 - - - - 04 \cdot 05 \cdot 06$ 



### 3 — LAYING

### THE GROUNDWORK

As mentioned in section 1, the experience of Ceará in fostering learning outcomes through TA and incentives is supported by three key conditions for success: monitoring and evaluation (M&E), local autonomy, and political leadership. In this section, we explain how and where political leadership engages with local governments to lay the groundwork for the implementation of the TA initiatives.

Head of Head of Full alignment the central the central between government is government the central commited to engages with local government Shared-pact between the education central and local levels and her/his reform and governments around universal literacy secretaries willing to play to present of education a decisive the policy and finance and get support leadership role for the reform in this effort

> FIGURE 5 — Key aspects to lay the groundwork of the technical assistance

> > program

The first step is ensuring that the head of the government (i.e., the president or governor) is committed to the education reform and willing to pay a decisive leadership role in this effort. Most often, education reforms are led by the education ministers or education secretariats of local governments. To implement the kind of reform seen in Ceará, it is critical that the head of government leads the process. A key reason for this is that the incentive mechanism involves linking non-educational revenue to education performance, which requires the support of Treasury. The head of government has greater ability and legitimacy to place the reform at the top of both education and finance agendas. The reform also impacts local budgets, which is a matter of great concern to local heads of government, like mayors, and requires their buy-in. The dialogue between local and central governments should happen between those who can influence both education and treasury decisions. In addition, support at the leadership level sends an important message to society about the importance of education to the administration. Therefore, the head of the central government must be aware and committed to his/her leadership role.

A successful education reform requires solid coordination between the head of government and the ministers of education and finance. The head of the government has a key coordination role in the successful implementation of an education reform of the kind seen in Ceará, since the

<sup>5</sup> For details on how to operationalize a results-based financing framework, see Holanda, Barbosa, Cruz, Loureiro. Implementing a Results-Based Financing Mechanism for Subnational Governments to Improve Education Outcomes: An Implementation Guide Inspired by the Case of Ceará, Brazil, World Bank, 2020.

impacts of the education reform are greater when technical assistance is combined with incentives. As such, both the ministers of education and finance should be involved. The ministry of finance can lead the design and implementation of the incentive mechanism, while the ministry of education is responsible for the process of setting learning goals and supporting local governments to raise education quality. The head of government is the most suitable person to liaise between secretariats, assuring that both are committed to fostering education, dedicating time to implement the reform, and assisting local governments.

It is also critical that the head of government engage with local governments to introduce the education reform and get their support. A precondition of Ceará's literacy policy was the autonomy of local governments in education provision. Therefore, it is key to obtain political support from local governments. Given the dual characteristic of the reform – educational and financial – the head of government is best positioned to lead this engagement and to establish a partnership between central and local governments. Two aspects should be at the center of this dialogue: 1) the importance of education and the role of literacy in setting the basis for learning and 2) the establishment of a cooperation framework between state and municipalities with the goal of improving education rather than auditing or controlling local governments.

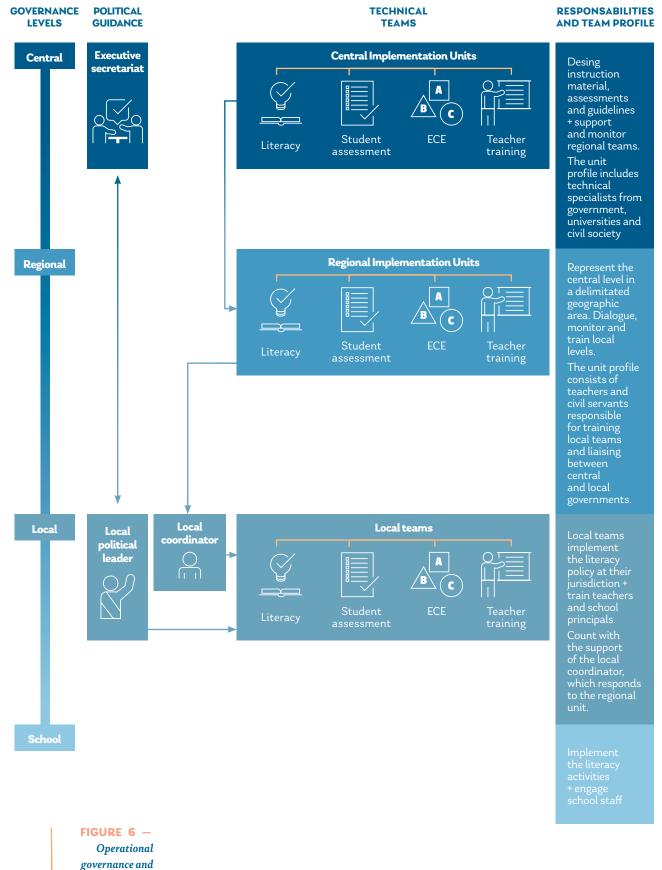
The partnership between central and local governments to foster education is materialized through a shared pact. After getting the support of the heads of local governments, it is important to widely communicate this partnership. Public statements about the partnership promote the engagement of the local secretariats of education and finance, as well as teachers, principals, and the school community. It helps to garner civil society support, which raises local governments' accountability for results.

The sustainability of the shared pact can be maintained by a structured governance. The head of government is responsible for creating a political governance structure between central and local levels,<sup>7</sup> which is operationalized by an executive secretariat and is the basis for the implementation of the program. The executive secretariat supports local political leaders and stimulates their involvement in the program. The operation of the TA is structured in a cascade model, with a central implementing unit (CIU), regional teams, and local teams. Both CIU and regional units have a similar structure, organized in four areas: 1) literacy, 2) student assessment, 3) early childhood education (ECE), and 4) teacher training.8 The CIU designs the instruction material, learning assessments, and operation guidelines to support the regional and local levels. Regional teams train local staff and support and monitor local implementation. Local teams can be organized under the same areas of the central and regional units, but this decision depends on each government, since the literacy policy is a cooperation framework and local governments have autonomy to organize themselves in the way they consider most appropriate. The central government finances a local coordinator for each local government to support program implementation and raise the technical capacity of local education secretariats. This operational structure is responsible for supporting teachers and schools to meet the objectives of the program, implementing the literacy strategy in each class. The structure also fosters accountability of each educational agent involved in the process

<sup>6</sup> Lautharte, I., Oliveira, V. H., Loureiro, A. Incentives for Mayors to Improve Learning: Evidence from state reforms in Ceará, Brazil. Banco Mundial. Policy Research Working Papers (forthcoming)., 2020.

<sup>7</sup> For details on how to operationalize a results-based financing framework, see Holanda, Barbosa, Cruz, Loureiro. Implementing a Results-Based Financing Mechanism for Subnational Governments to Improve Education Outcomes: An Implementation Guide Inspired by the Case of Ceará, Brazil, World Bank, 2020.

<sup>8</sup> In Ceará, as the education policy evolved, the program expanded its coverage from literacy to all primary and lower secondary education subjects. In this process, it included two new organizational areas, one for the final years of primary education (after the student is literate) and another for lower secondary education. In both cases, the focus is on Language and Mathematics.



implementation

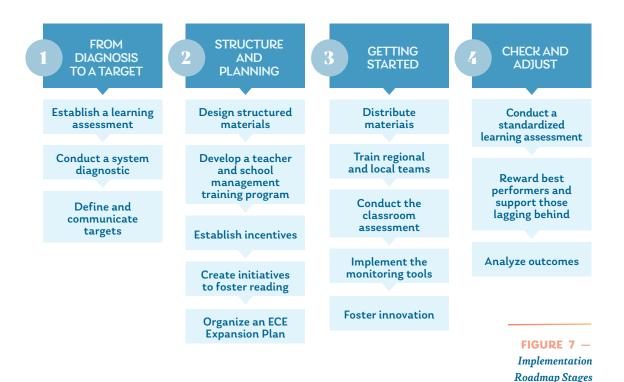
levels

 $01 \cdot 02 \cdot 03 \cdot 04 - - - 05 \cdot 06$ 



### 4 — IMPLEMENTATION ROADMAP

This section presents the main steps for the planning and implementing an educational model for achieving universal literacy at the right age, inspired by the successful case of Ceará. The implementation roadmap is aligned with the school year calendar and its structure is divided into four stages: 1) From diagnosis to a target; 2) Structure and planning; 3) Policy implementation; and 4) Check and Adjust. The roadmap highlights the synergy between the three components of technical assistance, as well as the importance of constant updates to the plan and adjustments of the actions based on each region's context and the results of the monitoring learning protocols.



### **STAGE 1**

### FROM DIAGNOSIS TO A TARGET

Define a reasonable, challenging, and achievable learning target based on a census-based diagnostic of student learning, focusing on literacy

The first step in establishing a TA system is to conduct, analyze, and communicate a diagnostic evaluation of the network to identify student literacy levels and define a reasonable, challenging, and achievable target. Good communication with the regional and local levels is key.

This three-step stage is a crucial element in establishing a robust shared pact between central and local governments to promote literacy with well-establish targets. It is impossible to create the necessary sense of urgency to boost TA activities without evidence of the level of students' literacy and learning.

•

### 1.1 — ESTABLISH A LEARNING ASSESSMENT TO GUIDE THE INTERVENTION

# FROM DIAGNOSIS TO A TARGET Establish a learning assessment Conduct a system diagnostic Define and communicate targets

**Gather information on the strengths and weaknesses of the local education systems**. The CIU must define an assessment of literacy levels to understand the level and inequalities in learning within the local education systems, the regions, and the schools.

The student learning assessment design must be able to assess the level of proficiency of each student in literacy. The use of **item response theory (IRT) allows for a comparison of the literacy scores over time**. The learning assessment provides results for the education system, municipal, and school levels to support the definition of the literacy goals for the TA activities and shared pact.

Some of the key questions to be answered by the assessment are:

- $\bullet$  What is the current level of literacy for each student, including at the end of  $2^{nd}$  grade?
- Which local systems/schools have the highest and lowest learning levels?
- Which local systems/schools have the highest and lowest rates of learning inequality among their students?

The evaluation's organization and application by an external entity for all local systems and schools generates greater reliability in the evaluation results and also mitigates the risks of the leakage of tests or manipulation of the results.

### 1.2 — CONDUCT A BROAD EVIDENCE-BASED DIAGNOSTIC OF THE EDUCATION SYSTEM



Engage teams from different areas to develop and apply a comprehensive diagnosis of the local systems, and to organize and tabulate the information collected. Representatives of the teams responsible for pedagogy, teacher training, evaluation, and dialogue with local networks should participate in the elaboration of the diagnosis, in addition to the team responsible for information management and data collection at the central level.

The CIU should prepare a first version of the diagnosis, defining the main questions to be answered, considering the project's different action fronts and the instruments to be used. The following table presents a suggestion of key questions and proposed instruments for the diagnosis.

nostic, focusing on three areas: literacy instruction, pedagogical support, and governance practices. It is advisable to pilot the instrument on a small sample to calibrate and refine the questions.

### BOX 4: KEY QUESTIONS AND INSTRUMENTS FOR THE EVIDENCE-BASED DIAGNOSTIC

### 1. Literacy instruction

### **Key Questions**

- What percentage of teachers with adequate training?
- What is the main area of training of teachers?
- Does initial teacher training cover classroom management?
- Is initial training in line with the development of the knowledge proposed in the basic education curriculum?
- Does initial training address teaching-learning methodologies for literacy at the right age?
- What actions are underway in local networks and schools regarding literacy instruction?
- What are the best practices in literacy instruction?
- Are results of the best practices being monitored at the local level?

### Instruments

- Identify and organize administrative data on this topic
- Survey local networks and schools to map ongoing actions
- Undertake a qualitative analysis of university teaching curricula

### 2. Strengthening the governance of municipal secretariats of education and providing incentives to promote the exchange of best pedagogical practices

### **Key Questions**

- Which networks/schools have a specific policy on literacy at the right age in place?
- Which networks/schools have staff and the structure for training focused on literacy at the right age?
- Which networks/schools offer educational support material for teachers and students with a focus on literacy at the right age?
- Which networks have the financial capacity to structure a training and monitoring team for the program?
- What is the availability of a library with educational books and space for teacher training in schools?
- What are the organizational characteristics of each network (total schools, total students per school in the 1st and 2nd year)
- What is the organizational structure of the schools in the network? Do all schools have a staff member, in addition to the school principal, whose responsibility is to manage the school's pedagogical aspects (e.g., a pedagogical coordinator)?
- What are the training processes for teachers and school managers in networks and schools?
- What are the best practices focused on technical aspects and what are the main obstacles in the current selection processes?

### Instruments

- Questionnaire application and interviews with local networks and schools to map ongoing actions
- Search information already gathered about the infrastructure and enrollment of schools and networks

### 3. Promoting the pedagogical use of the results of student assessments

### **Key Questions**

- Are there student learning assessment policies in the networks? Are they carried out by the networks themselves or third parties?
- Are there procedural or diagnostic assessments carried out periodically throughout the year at the local level?
- To what extent are the pedagogical results of the evaluations used in planning pedagogical actions?

### Instruments

 Questionnaire application and interviews with local networks and schools to map ongoing actions **Finding Talent**. The diagnostic process can serve not only to better understand the characteristics of the education networks, but also to identify the networks, schools, and teachers that can support the implementation of the policy itself. In this initial mapping phase, people capable of contributing to the structuring of support actions for literacy will be identified, such as professionals who can prepare teaching materials and implement training policies, structure the evaluation and monitoring policy, and develop governance models that can serve as a basis for central policy.

### 1.3 — DEFINE AND COMMUNICATE TARGETS

# FROM DIAGNOSIS TO A TARGET Establish a learning assessment Conduct a system diagnostic Define and communicate targets

**Once the diagnostic is completed, define clear learning goals.** With the structure and capacity identified in the evidence-based diagnostic and the student literacy levels achieved in the first assessment, the CIU should move to define goals for the improvement of the latter. Considering the goal of literacy at the right age, the main goal should be the literacy of all students up to the age of 8. The State of Ceará showed that it is possible to increase the percentage of literate grade two students from 40% to about 90%.

To evaluate literacy level, it is necessary to develop a learning indicator for each school. This indicator should consider the average student's performance and measure learning inequality and participation in the external evaluation. The box below presents a proposed indicator.

### **BOX 5: SCHOOL PERFORMANCE INDEX**

An indicator for monitoring school literacy results, known as the "School Performance Index," is calculated based on three factors: proficiency of a school's students in student learning assessment, the participation rate of a school's students in student learning assessments, and a factor adjustment that considers the level of learning inequality among students from the same school. This indicator is converted into a scale from 0 to 10 to better inform the network and civil society about the relative performance of each school.

School Performance Index = (Average school proficiency)/(maximum proficiency in the evaluation) <math>x 10 x Participation rate x Adjustment factor

The inclusion of a participation rate encourages schools to mobilize all their students to participate in the student learning assessment, not just those who perform well. The adjustment factor encourages the school to take actions directed at all students, since schools with greater learning inequality will be penalized.

The setting of literacy goals throughout each year should be proposed considering the diagnosis and the complexities of the network. Also, the central level must define minimum learning expectations for the student throughout the 1st and 2nd year cycles. These guidelines, which can serve as a basis for the elaboration of structured materials, the development of training activities, and the elaboration of student learning assessment and diagnostic evaluation, which can be widely shared and studied by all pedagogical actors involved in the program.

The CIU define the goals and work actively to communicate them to all levels and actors involved in the policy. The goals should be presented for each local level and made public to enable access to anyone interested in them. The publication of the goals is important, both as an orientation and as an incentive for managers, teachers, and students. In addition, it is important to involve the leaders of local and regional teams in the analysis of the results of the diagnosis and present a summary of the information to all schools.

### **STAGE 2**

STRUCTURE AND PLANNING

Design and plan activities and guidelines based on the diagnostic results, with the central level working on each area

A clear and stable governance among actors is decisive to an effective implementation of an educational policy to achieve literacy at the right age. Teams at the central, regional, and local levels must have clear roles and good communication.

This five-step stage establishes the technical framework of all TA activities. Each area works to set a high-level and detailed action plan to support the regional and local levels. Each team includes technical specialists from the central government and experts from universities or civil society.

### 2.1 — DESIGN STRUCTURED MATERIALS USING THE LITERACY ASSESSMENT RESULTS

STRUCTURE AND PLANNING Develop a teacher Create Organize and school Establish initiatives an ECE structured management incentives to foster Expansion materials Plan training reading program

Design structured material to support literacy learning, especially for resource-constrained municipalities. The structured material based on theoretical-practical knowledge of literacy,

as well as results of diagnostic learning, is **composed of four documents (guidelines for regio-nal and local trainers, teacher manual, student book, and activity booklet).** These materials balance time-on-task with the number and complexity of activities and proposes a clear structured pedagogical route to prioritize foundational literacy skills acquisition.

The central level also develops a schedule of pedagogical activities, with orientations for each week. The structured material activities are organized within a daily routine of 90 minutes, divided into three pedagogical periods: time to enjoy reading, time for reading, and time for speaking and writing acquisition. This material provides guidance on actions to carry out in each classroom and school. It also allows for training actions and follow-up meetings between management teams to maintain an objective focus and effectively discuss actions aimed at learning.

### Engaging school and local levels in the use of structured materials:

The central and regional teams are responsible for engaging the key stakeholders to mitigate the risks of misinterpretation and/or resistance to the structured material.

In the first year of implementation, a fast and reliable solution is the procurement of structured materials from private companies. In this case, it is essential that the central level designs the material methodology and defines the learning goals that must be met at the end of every year.

Also, it is important to allow local governments and schools to choose from at least three sets of materials aligned with central level guidelines. Including schools and local governments in the decision process promotes the effective use of the structured materials in the classroom.

After capacity is built and technical teams at all levels are strong, it is possible to designate a unit to produce structured materials at the central level. It is important to involve actors from different governance levels in this material production.

### 2.2 — DEVELOP A TEACHER AND SCHOOL MANAGEMENT TRAINING PROGRAM



The central level should design an in-service professional development program for teachers and school management teams. The program's key aspects are:

### 1) Cascade model

Central tutors conduct regular training sessions for a group of technical personnel among the regional trainers, and the regional trainers conduct the training for local trainers. In municipalities with critically low literacy levels, the regional level trainers can also train teachers directly. Each trainer becomes responsible for the training of a limited set of teachers. The local team and school principals set the number of teachers assigned to each trainer. Successful programs point to the ideal workload for regional and local trainer training (64 hours distributed in 4 bi-monthly modules of 16 hours each) and for teacher training (64 hours distributed in 8 monthly 8-hour meetings, preferably subdivided into two days per month). Regional trainings should happen before the beginning school year. After that, the local training takes place at the beginning of the first school term. Teacher training can also take place starting in the first month of classes.

2) Guidelines to select and train the trainers (regional and local).

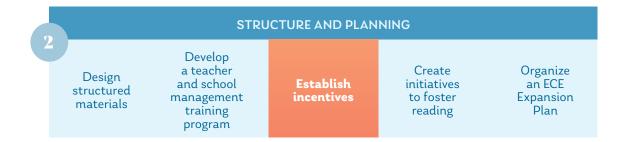
Regional teams must offer technical assistance during the selection of local trainers. Although the local level is autonomous in managing the local education system, the financial resources to hire the trainers (both regional and local) will be provided by the central level.

3) Practical and tailored meetings To promote the use of active learning strategies, practices, and structured materials in classrooms. These actions also involve classroom observations by trainers and are based on the structured material that teachers use in their daily routines.

4) School management training program

To promote the use of the monitoring protocols. To define the activities calendar, the school management team will need to work with the local team to determine the days of each month when the training will take place.

### 2.3 — DEVELOP AN INCENTIVE MECHANISM WITH HIGH AND LOW PERFORMANCE SCHOOLS WORKING TOGETHER



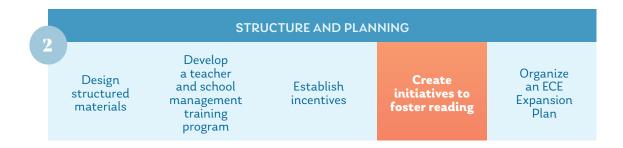
Develop incentives for good pedagogical management, defined by student learning assessment results, and enforce a healthy competitive environment. At the end of every year, the best-performing teachers and their schools are given financial and social rewards. Also, the best performing municipalities are rewarded with more funding from the central level.

Low performing municipalities and schools receive extra technical support and funding from the central level.

At the beginning of the school year, local level managers, school principals, and teachers must know about the incentive mechanisms in place. For this, it is essential that mechanisms are easy to understand and that they are well communicated by the central level.

**Incentives for best performing schools supporting low performing schools.** The central level can provide pecuniary and reputational rewards to best performing schools to partner with support low performing schools, with both schools receiving a prize for improvements in education outcomes. The total score for each school should account not only for learning, but also for the percentage of students that participated in the student learning assessment. This is a strategy to encourage the participation of all students in the assessment, not just the best-performing students. Part of the monetary award can be given when the school presents a plan for the use of the resources; the remaining funds can disbursed at the end of the next school year if the school is able to maintain its good educational results and support a low performing school to improve its results.

### 2.4 — CREATE INITIATIVES TO FOSTER READING



Develop initiatives to promote reading culture based on the assumption that literacy and reading are essential to reducing learning poverty. Learning to read represents the acquisition of a new language to access knowledge and information and to develop critical thinking. Thus, it is necessary to practice reading to train the reader and create the joy of reading.

It is important that students have constant and easy access to age-appropriate and stimulating materials connected to intentional pedagogical actions mediated by the teacher.

<sup>9</sup> For the corresponding program in Ceará, see: Bacalhau, Priscilla; Lautharte, Ildo; Goldemberg, Diana. 2020. Can Peer Mentoring Coupled with Incentives Affect School Turnaround? Evidence from Ceará State in Brazil (English). Washington, D.C.: World Bank Group. http://documents.worldbank.org/curated/en/996321595484841150/Can-Peer-Mentoring-Coupled-with-Incentives-Affect-School-Turnaround-Evidence-from-Ceara-State-in-Brazil

### Classroom libraries

The main goal is to create a small library for students and teachers in each ECE classroom and in the 1st and 2nd grade classrooms of primary education. The creation of literature collections is driven by two processes: the purchasing of titles from publishers and the organization of a national contest to award and publish new literature.

### Literature Contest

The national contest allows the central level to invest in the local production of books that reflect regional values, themes, and cultures. The central level is responsible for the layout, illustration, and publishing of the books. The winning books are printed and distributed at the local level. The Ceará case shows that investing in regional literature can be cheaper than purchasing books from publishers.

### Reading culture

The central level also develops activities with teachers to develop reading habits outside of school. There is a relationship between student reading habits and teachers' reading culture. For this reason, the central level is responsible for editing a magazine for teachers to share classroom experiences through interviews, articles, and essays on literacy and reading. The central level supports the local levels to organize workshops to stimulate the use of the literature collection with storytelling and the creation of reading clubs as spaces to meet and integrate teachers and the school community in shared reading experiences.

### 2.5 — ORGANIZE AN ECE EXPANSION PLAN

### STRUCTURE AND PLANNING Develop a teacher Create Design Organize an and school Establish initiatives ECE Expansion Plan structured management incentives to foster materials training reading program

**Offer technical and financial support to expand and enhance ECE provision.** ECE sets the basis for a successful literacy strategy, since it stimulates children and foster their nutritional and socioemotional development. The way that central level can support local governments in this matter can go from financial support to build ECE facilities and purchase necessary materials and equipment, as well as technical support in providing pedagogical guidance and teacher training focused on ECE.

### With the planning and management structure in place, it is time to implement the program activities.

The implementation happens with materials and training to improve pedagogical practices and is supported by local M&E and innovation.

This section describes the five-step stage that begins with the distribution of the structured materials and the training of regional and local teams to conduct teacher and school management training, followed by a classroom-level assessment and the implementation of monitoring tools, and ending with the fostering of innovation at the local level.

### 3.1 — DISTRIBUTE THE STRUCTURED MATERIALS

| 7 | GETTING STARTED         |                                      |                                  |                                |                   |
|---|-------------------------|--------------------------------------|----------------------------------|--------------------------------|-------------------|
|   | Distribute<br>materials | Train<br>regional and<br>local teams | Conduct the classroom assessment | Implement the monitoring tools | Foster innovation |

**Coordinate logistics to ensure that the structured materials arrive before the school year starts.** The distribution of the materials involves not only logistics, but also an important round of engagement of local teams and schools. The materials are the first physical embodiment of the new model. In addition, they serve as the first contribution from the central and regional governments to the local level, signaling that collaboration is being enhanced.

The regional team is responsible for distribution. This is an opportunity for the team to engage with local and school teams and to talk about the TA, its governance, the targets set in the first stage of the process, and their link with the material being distributed.

000

### 3.2 — TRAIN REGIONAL AND LOCAL TEAMS TO CONDUCT TEACHER AND SCHOOL MANAGEMENT TRAINING



Promote in-service professional development program for teacher and school principals throughout the year based on the planed methodology and guidelines.

Training seminars

For an effective implementation of a local and school training routine, there must be clear and agile communication between the different management levels. Thus, it is fundamental that each actor acknowledges the goals to be achieved and its individual responsibility in the process. One way to ensure alignment is to hold periodic training seminars. A suggestion of the meetings arrangement and discussion guidelines is presented in table 3, which can serve as a basis for the preparation of the annual plan for training and monitoring.

Increasing school and local level autonomy An increasing level of autonomy for local teams in defining the meeting agendas is expected. In general, the first meetings start from guidelines proposed by the central team and from which the regional teams were formed. The initial guidelines tend to be focused on practical aspects of the classroom, such as the application and use of assessment instruments, the use of structured materials, and strategies for promoting reading culture. As local networks gain expertise and autonomy, there is a demand for training focused on the theoretical aspects that support the foundations of the proposed methodology. Autonomy and innovation at the local levels, focused on improving learning indicators, are highly desired and encouraged.

Structured materials for management and teacher training teams The central level should maintain a steady content production and a large repository of resources related to management and teacher training. The central level provides local teams and schools with proposed guidelines for the preparatory pedagogical week, which happens at the beginning of the school year, and booklets emphasizing fundamental aspects of school management for school principals and local team staff. Materials with literacy strategies and assessment instruments are also distributed to the local level and schools. A well-organized central team is fundamental in energizing the whole system with a culture of intense growth and learning, directed to the accomplishment of learning goals.

|             | Central with        | Regional with   | Local with                        |
|-------------|---------------------|-----------------|-----------------------------------|
|             | Regional levels     | Local levels    | School levels                     |
| Recommended | Meetings with all   | Regional teams  | The frequency of meetings between |
| Periodicity | regional teams must | must visit each |                                   |

regional teams must be held **monthly**.

Meetings or discussions between the central team and the regional teams must take place daily.

Regional teams must visit each local network **at least once a month** to monitor ongoing actions and their results. The frequency of meetings between local teams and their schools depends on the size of each local network, but at least once every two months.

Recommended meeting agenda

Monitoring of meetings held between regional and local teams

Discussion of planned actions based on visits by regional teams

Discussion of ongoing actions by local teams that most need support Monitoring of meetings held between the local team and each school

Discussion of planned actions based on visits made by local teams in each school

Planning of training actions at the local level

Discussion of specific actions to be undertaken in schools that most need support Monitoring of attendance indicators and student performance in summative and formative assessments carried out by the schools

Planning of actions to support students with the greatest difficulties

Discussion of the training guidelines carried out by the schools in their training sessions and of the class observations made by the pedagogical coordinator(s)

Monitoring the number of classes held effectively in each school

Monitoring the use of structured materials and strategies for promoting reading culture

### TABLE 2 -

Recommended periodicity and agenda for the training meetings

### 3.3 — CONDUCT THE CLASSROOM ASSESSMENT



With the structure implemented and the materials and training put in place, the CIU must take assessment to the classroom level. and weaknesses. The standardized learning evaluation is important to track progress along the years, but is not the most appropriate tool to support teachers. Not only because of the nature of the exam, but also because it is conducted at the end of the school year. In this sense, it is advisable to have a pedagogical assessment to help teachers understand the learning level of its students at the beginning of the school year. It serves as a baseline and can be reapplied in the mid-term to track progress and guide the pedagogical action. This gives teachers a way to determine how their students are advancing and to help them based on their individual strengths

### The classroom assessment involves the action of all levels, from the top to the school.

The central level promotes the application of the classroom assessment protocol at the beginning of the school year (diagnosis phase). The regional team gives technical support to the local level during the implementation process. It is responsible for organizing the discussion with the local teams and adapting the structured material according to the results. Local teams are responsible for organizing the implementation and consolidating the results. Lastly, schools are responsible for ensuring student engagement and participation.

### 3.4 — IMPLEMENT THE MONITORING TOOLS



Monitoring of the literacy policy must occur on a daily basis, guided by protocols established by the central level and specific and measurable indicators. Some of the tools that support the TA monitoring system and the indicators defined by the central level are described below.

SMART monitoring indicators defined by the central level

To achieve the program target, as described in section 1.3, the central level defines a set of monitoring indicators for each TA governance area. TA monitoring indicators should follow SMART (Specific, Measurable, Attainable, Relevant and Time-Bound) methodology, which should serve as a guide for the development of new indicators or the adaptation of TA indicators in each region.

Clear monitoring protocols The central level provides regional and local levels with clear and complete monitoring protocols. These protocols instruct teams to 1) elaborate a diagnosis of the local level educational context; 2) based on the diagnosis, elaborate the local work plan; and 3) keep a regular record of the program indicators. The protocols are guided by the established program indicators. For each indicator, there is an instrument to be used by the regional and local teams.

**Monitoring tools** 

The central level should produce evaluation rubrics for the monitoring of each established indicator. Schools might also have specified instruments to monitor each literacy level and reading routine, and to monitor teacher attendance and their use of booklets. The instruments are filed at the end of each bimester. It is recommended that the central level provide a digital platform for regional, local, and school teams to regularly enter the monitoring results into an organized framework.

Strong communication

The monitoring protocol instructs teams at every level to keep an updated list of the contacts of its counterparts at the level below. Regional level leadership might maintain a contact list and a messaging group with the local level secretaries of education. Regional level technical teams keep contact with local level technical teams. Local teams keep contact with school principals. This communication occurs on a daily basis, focused on the monitoring of specific actions, sharing of materials, and support in the preparation of work plans and in the execution of specific actions.

### 3.5 — FOSTER INNOVATION AT LOCAL LEVELS

Distribute regional and classroom materials local teams assessment Tools

GETTING STARTED

Conduct the Implement the monitoring tools

The central and regional teams should foster a collaborative environment that promotes innovative actions and sharing of best practices within the local levels of each region. The municipalities that stand out the most have the common characteristic of going beyond the instruments proposed by the central level. Some of the most common innovations established by the local management teams are highlighted below:

Expansion and improvement of the evaluation process

The central level provide an annual external assessment to be carried out at the end of the school year, and an initial diagnostic assessment to be carried out at the beginning of the school year. Local levels can deepen this dynamic, creating their own assessment system with periodic formative assessments, carried out throughout the school year, and they can expand assessments for series and curriculum components not covered by the central level.

Family engagement

The involvement of families in the student learning process is highlighted by local leaders as a fundamental aspect for the effectiveness of the policy. It is up to the local teams to foster a welcoming and communicative environment, with periodic meetings and individualized conversations to explain student potential and challenges. Engaged parents tend to demand good results not only from students but also from school management teams.

Extra classes for those who need it most Bearing in mind that the learning indicators proposed by the central level consider not only the average results but also the level of educational inequality present in schools and at local levels, local levels can carry out extra class activities for students who are most in need. These students should be selected based on the results of the diagnostic and formative assessments. In general, extra classes should occur after school regular time, with tutoring and specific activities for each student to overcome their learning gaps. These actions are carried out with local level resources.

### **STAGE 4**

### **CHECK AND ADJUST**

Assess the literacy level of the students at the end of the school year, reward the best performers, and plan the next pedagogical cycle with extra support for those lagging behind.

The establishment of a solid and reliable M&E system that continuously measures key education outcomes—including student learning—is an important element for the TA in assessing student achievement. Results provide a diagnostic of literacy levels and support the establishment of learning goals, which is transmitted to teachers and schools through training and monitoring activities.

This subsection describes the three-step stage that begins with the implementation of a literacy summative assessment, followed by the awarding of a prize for the best schools, and ending with the analysis of the literacy outcomes that will be used to plan the next school year, closing the cycle.

Reward best performers and support those lagging behind

Analyze outcomes

At the end of each school year, a student learning assessment must be carried out to diagnose the literacy levels of students from all networks. The evaluation serves as the basis for defining the learning indicators of each school and for directing the work of the management teams for the next school year. Its results should also serve to reward the best performing schools and to allocate additional support for the worst performing schools.

The summative assessment closes the cycle started with the initial literacy assessment and followed by classroom assessments in the beginning and middle of the school year. It serves to evaluate the progress of the students, schools, and networks towards the established goals and to define goals for the next year. It is also the main tool used by the central government to evaluate policy implementation outcomes. Figure X shows the assessments throughout the school year.

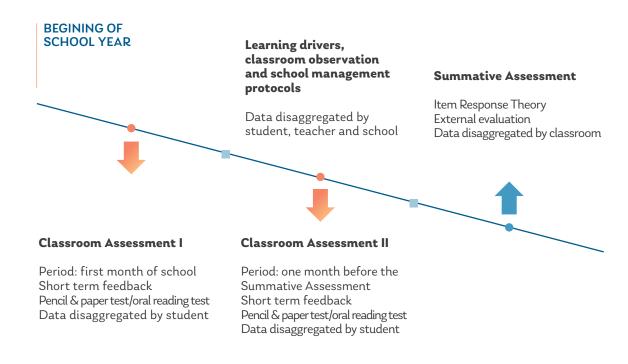


FIGURE 8 -

Assessments throughout the school year Reward best performers and support those lagging behind

Analyze outcomes

With the results of the student learning assessment, it is time to reward schools that are performing well and to define support policies for schools that still face challenges.

An annual event to reward best performers The presence of teachers, school managers, and local, regional, and central level leaders, helps to give social and financial recognition to all who are responsible for good educational performance. The central level should be responsible for organizing the event and ensuring the necessary resources for the awards.

Performance map

The analysis of the student learning assessment results and the re-planning of the next school year is a fundamental pillar of the policy, as described in the next step. Along with the evaluation results, the central level publishes a map with the learning indicator results for each local level. This map indicates clearly for civil society which local levels are prioritizing and achieving good educational results. The transparency and communication of these results have the effect of creating a healthy competitive environment between schools and municipalities to achieve better educational results.

### 4.3 — ANALYZE LITERACY OUTCOMES

**CHECK AND ADJUST** 

Conduct a standardized learning assessment

Reward best performers and support those lagging behind

**Analyze outcomes** 

The analysis of the literacy outcomes subsidizes the planning of the following year. The results of the summative assessment should be compared to the targets set in step 1.3., and the expected outcomes for schools and students should be compared to the results achieved.

**Students' individual results should be used at the school.** The CIU, with the support of the regional level, should produce and communicate reports to the schools with the results achieved by their students. Literacy assessment results for each student should be the main topic of discussion and work in the planning meetings at the beginning of the next school year. Students

who do not reach the expected minimum literacy proficiency should be accompanied and receive extra support in the following school cycle.

**The results should also be analyzed at the school level.** The CIU must produce reports at the school level to share with regional and local levels so they can evaluate school progress in policy implementation and student learning. Schools that have not achieved their goals should also be monitored and defined as priority schools for the next school year.

**Finally, the CIU** must measure and analyze the results achieved by each local and regional level. The regional and local networks with poorer results can receive special attention in the next year to help identify the reasons for their difficulty and to determine the necessary support needed to overcome them.

The results of the summative assessment serve as an initial assessment for the next year, thus closing the plan-do-check-adjust cycle. The work does not end by finishing the first year of implementation and must be continuously adjusted so the education management and the student learning can be continuously improved. The results analyzed at this step are equivalent to those in step 1.1 and are the basis for the new targets to be set as the previous targets in step 1.3.

- **01 · 02 · 03 · 04 · 05 06**

# IMPLEMENTING THE MODEL IN DIFFERENT CONTEXTS

# 5 — IMPLEMENTING THE MODEL IN DIFFERENT CONTEXTS

The structure presented in Chapter 3 and the capacity supposed in Chapter 4 are a benchmark for the implementation of the TA. There are not, however, absolute fixed structures and capacities needed for TA to succeed. Each region has its own reality and pre-existing conditions. This section proposes ways forward for contexts in which the necessary factors are not in place prior to the implementation of the path presented in this guide.

# 5.1. WHAT IF THE STUDENT LEARNING ASSESSMENT SYSTEM IS NOT CONSOLIDATED OR DOES NOT EXIST?

In this case, it is recommended that the government hire a specialized institution to organize and apply, at least, a literacy assessment for all students in the  $2^{nd}$  grade, including the diagnosis (step 1.1) and the summative (step 4.1). This creates the initial conditions to start a one-year cycle of the TA. This experience will build technical capacity at the central level and consolidate the student learning assessment system among the local levels and main stakeholders. Once that happens, the central level can gradually expand the assessment to all grades, including other subjects.

As mentioned in the implementation roadmap, IRT is recommended for use in the assessment design. However, in the case of budget constraints, it is possible to start the process with the more straightforward assessment process outlined in step 1.1. Sobral's education system in Ceará organized the diagnosis with a simple reading fluency test applied to 2<sup>nd</sup> grade students.<sup>10</sup> This activity needs a significant amount of effort and resources, and the central level must take part in the budget to allow the learning assessment to continue every year. However, literacy level improvements will prove the importance of this investment.<sup>11</sup>

# 5.2. WHAT IF THERE IS NO MONITORING AND EVALUATION SYSTEM IN PLACE?

The TA implementation roadmap creates conditions to establish or review an M&E system. Step

<sup>10</sup> Cruz, Louisee; Loureiro, Andre, 2020. Achieving World-Class Education in Adverse Socioeconomic Conditions: The Case of Sobral in Brazil. World Bank, Washington, DC. https://openknowledge.worldbank.org/handle/10986/34150

<sup>11</sup> See the World Bank guides for establishing and managing Learning assessment systems: https://openknowledge.worldbank.org/handle/10986/32461

1.2 shows the key questions and instruments for the evidence-based diagnostic. Those questions are an excellent guide to start designing an M&E system at the central level. The central level's TA operational governance has a technical team (student assessment area) responsible for designing monitoring protocols and boosting indicators and data use at the local level. The communication channel between the local, regional, and central levels will allow access to updated information. For the TA first-year cycle, the data monitoring could be done on electronic sheets or even on paper, consolidating the data at the regional level. However, the central level needs to provide a digital platform to establish a robust M&E system, improving the TA's efficiency.

# 5.3. WHAT IF THE CURRICULUM IS NOT UPDATED OR WELL-ESTABLISHED?

In this case, the recommendation is to establish clear learning goals focused on literacy and reading skills. The learning goals are defined for each bimester to support formative assessment systems throughout the school years. The learning goals defined by the central level must apply to all local levels and schools to avoid asymmetries and learning inequality. Sometimes, a curriculum review is a long-term process, and it could delay the TA implementation. An excellent way to avoid this problem is by starting a discussion about which skills should be expected for all students at the end of the  $2^{nd}$  year of elementary school (8 years old). After a few TA years-cycles, the central level can conduct a broader review of the curriculum using the cumulative knowledge and data to support the process.

# 5.4. WHAT IF THE SUPPLY CHAIN FOR THE PRINTING AND DISTRIBUTION OF LEARNING MATERIALS IS LIMITED?

During Step 2.1, if the central government does not have the capacity to print and distribute the structured materials, the CIU must research the local printing and distribution sector to identify its capacity. Where there is no structured local supply chain for the printing and distribution of the learning materials, the execution of Step 3.1 may then be require hiring internationally or, in the case of existing capacity that can be expanded, subsidized by the central government.

The existence of a national program of structured materials for schools should foster the industry and reinforce capacity. With the annual process of design, printing, and distribution of the materials, it is expected that the local printing and distribution sector would be strengthened. The importing of materials or subsidies will ultimately be reduced and ended as the local capacity increases to be meet the demand of the whole program.

### 5.5. WHAT IF THERE IS LANGUAGE DIVERSITY?

If there is a well-established language-of-instruction policy, it is possible to include this aspect in the TA implementation roadmap. One possibility is to create an additional technical team on operational governance to coordinate language diversity issues with the other TA teams. In the case of the discussion on language-of-instruction not being consolidated in the country and/or specific region, it would be possible to start the TA implementation with the official languages and add additional support at the local level to gradually include the other languages. It would be also important that the central level include indicators in the monitoring protocols related to the diversity of language and institutional capacity at the local level. A successful TA implementation will create an operational structure at the local level and build the capacity to implement evidence-based programs on teacher training and learning materials in other languages.

# 5.6. WHAT IF THERE IS LIMITED DECENTRALIZATION OR LITTLE FINANCIAL AUTONOMY AT LOCAL LEVEL?

In cases where the educational budget is highly centralized, it would be important that the central government provide resources for the local units to implement the TA. The central level can make available for local levels the student learning assessment system, the purchase of structured booklets and reading materials, resources for carrying out training seminars, as well as the structuring of regional and local teams.

For a higher level of effectiveness of the education policy, it would be important to allow some level of managerial decentralization. The central level can focus its responsibility on defining the guidelines and coordinating the program's actions. In turn, each local and school level should ideally have some autonomy to carry out its own actions and innovations, considering their local context and the learning goals established by the central level. Some level of discretion of the local levels to implement the program and pursue the targets set is fundamental for policy success. In Brazil, there is a national program for direct resource transfer from the federal government (central level) to schools across the country. Based on the guidelines established by the Ministry of Education, schools have the autonomy to use these resources to solve problems related to their daily tasks and implement additional actions directed to improve student learning and reading skills.

01.02.03.04.05.06



# 6 — FUNDAMENTAL ASPECTS OF POLICY CONTINUITY

A fundamental aspect of Ceará's successful educational model is that the program was maintained and continued to improve over different political terms. Some of the actions addressed in the implementation path have been catalysts to guarantee this continuity. In this section, we emphasize some of the aspects considered fundamental for policy continuity. An effective implementation of these aspects is especially important.

Ensure that civil society to supports the learning goal Having a concrete learning target is required to communicate and engage. If society is aware and supports the policy, politicians will certainly communicate the results, which, in turn, will increase public support. This creates a virtuous cycle between policy and society, making politicians (both those in the current administration and newcomers) more likely to focus on education. In so doing, politicians will achieve political gains and civil society will continue to demand this policy direction and accountability for its outcomes.

Strengthen technical teams Building capacity and fostering ownership among technical teams at the central, regional, and local levels favors policy continuity. When knowledge is spread across the implementation chain, more people know about how the program operates, reducing the impacts of personnel changes on teams. Strengthening local teams also contributes to tailoring the policy to local contexts, fostering greater impact. Empowered and well-trained technical teams are less susceptible to political rather than technical shifts in the program.

Increase school autonomy

Encouraging local governments to select school principals based on merit is critical for education systems with schools with a high level of autonomy. Strengthened school management allows governments to increase school autonomy, which has positive effects on schools and the secretary of education. Schools feel more empowered and have more possibilities to design pedagogical interventions based on their students' needs. The government has more time to focus on the pedagogical aspects of the education policy, rather than administrative tasks. Principals who feel more responsible for student learning are also less susceptible to big shifts in policy direction.

•

Strong incentives

A well-designed incentive mechanism for local governments and the award to top schools have short- and long-term incentives. The incentives are critical for a full engagement of local governments and principals with the technical assistance, as well as incentivizes them to maintain a good level performance over time.

Promote a healthy competitive environment Ceará's educational model was very successful in enforcing a healthy competitive environment between municipalities and schools. When the goal is to improve student learning, competition between schools and municipalities to perform is highly desirable. When political leadership changes, changing the direction of action risks leaving the municipality behind in the race for leadership in educational performance.

Legal framework

The incentive mechanisms and the technical assistance program in Ceará were enshrined in state laws. The discussion of the program in an assembly of representatives, resulting in a broad debate with civil society and politicians from the different political parties, is a relevant factor to guarantee the robustness of the policy and the continuity of its actions.

•

•

### **ABOUT THE AUTHORS**

**ANDRE LOUREIRO** is a senior economist at the World Bank's Education Global Practice. He holds a Ph.D. in Economics from the University of Edinburgh, United Kingdom, and a Bachelor's and Master's degree in Economics from the Federal University of Ceará.

**FÁTIMA ALVES** is an Education Specialist Consultant for international organizations (World Bank, GPE, and UNESCO). She holds a Ph.D. in Education from the Pontifical Catholic University of Rio de Janeiro (PUC-Rio). From 2008 to 2014, Fatima was a professor in the Department of Education at PUC-Rio.

**LOUISEE CRUZ** is a consultant at the World Bank's Education Global Practice. She holds a double MSc degree in Public Policy and Human Development from Maastricht University and the United Nations University, and a BA degree in International Relations from the University of São Paulo.

**MATHEUS ASSUNÇÃO** is a consultant at the World Bank's Education Global Practice. He holds a MSc in Economic Theory from the University of São Paulo and a BA in Economics from the University of Brasília.

**THIAGO CARDOSO** is a consultant at the World Bank's Education Global Practice. He holds a Master's degree in Economic Theory from the University of São Paulo.

