

Program Information Documents (PID)

Appraisal Stage | Date Prepared/Updated: 19-Mar-2022 | Report No: PIDA261936



BASIC INFORMATION

A. Basic Program Data

Country Brazil	Project ID P178563	Program Name RECOVERING LEARNING LOSSES FROM COVID-19 PANDEMIC IN BRAZIL	Parent Project ID (if any)
Region LATIN AMERICA AND CARIBBEAN	Estimated Appraisal Date 18-Mar-2022	Estimated Board Date 28-Apr-2022	Practice Area (Lead) Education
Financing Instrument Program-for-Results Financing	Borrower(s) THE FEDERATIVE REPUBLIC OF BRAZIL	Implementing Agency MINISTRY OF EDUCATION	

Proposed Program Development Objective(s)

The Program Development Objective (PDO) is to support state and municipal governments in the North and Northeast regions of Brazil to: (i) recover from school dropouts and learning losses related to the COVID-19 pandemic, and (ii) strengthen education management in primary and lower secondary schools.

COST & FINANCING

SUMMARY (USD Millions)

Government program Cost	493.61
Total Operation Cost	250.00
Total Program Cost	225.00
IPF Component	25.00
Total Financing	250.00
Financing Gap	0.00

FINANCING (USD Millions)

Total World Bank Group Financing	250.00
World Bank Lending	250.00



Decision

The review did authorize the team to appraise and negotiate

B. Introduction and Context

Country Context

1. The objective of this proposed Operation is to support local governments in North and Northeast Brazil in their efforts to recover from education losses related to the COVID-19 pandemic and to strengthen education management. This Operation concentrates on the most vulnerable students and schools who are likely those most affected by the COVID-19 pandemic with activities focusing (i) on North and Northeast Brazil,¹ two economically and socially fragile regions, and (ii) on schools where at least 70 percent of students receive conditional cash transfers (CCTs) under the Bolsa Família Program (BF). The Operation is structured in two components; (i) Component 1: "Recovery", which will support the activities, undertaken by the Government of Brazil (GoB), to reduce school dropout rates, learning losses and to accelerate future learning, and (ii) Component 2: "Resilience and Capacity Building" to improve the use of information, data and management practices in local networks to mitigate ongoing and upgoing crisis. All three stages proposed by the World Bank Group (WBG) COVID-19 Crisis Response Approach² (relief, restructuring, and resilience) are considered in this Operation that will benefit 11 million students from 18,000 primary and lower secondary schools³ (23 percent of all students in Brazil).⁴

2. **The COVID-19 pandemic had a profound impact on the Brazilian economy.** The impact of COVID-19 in Brazil was massive with more than 29.5 million cases (13 percent of the population) and 655,000 deaths (0.3 percent of the population) by mid-March 2022.⁵ The pandemic generates several challenges to the economy. In 2020, for example, the real growth of the gross domestic product (GDP) was -4.1 percent,⁶ the largest decrease observed since 1996. This negative result was a consequence of the

¹ North Brazil refers to the states: Amazonas, Amapá, Acre, Rondônia, Roraima, Pará and Tocanins. Northeast Brazil refers to states: Bahia, Sergipe, Alagoas, Pernambuco, Paraíba, Rio Grande do Norte, Ceará, Piauí and Maranhão.

² World Bank, 2020. Protecting People and Economies: Integrated Policy Response to COVID-19.

³ In 2019, 11.5 million students were enrolled in public schools at the creche, primary and lower secondary levels in the North and Northeast regions, representing around 20 percent of the student population of this age group. The Northeast has approximately 8 million students, 4.2 million were boys and 3.9 million were girls (or 57.9 percent). The region has around 50,000 indigenous students and 260,000 students reported having special needs. In the North, there were 3.3 million students in primary and lower secondary education in public schools, 1.7 million boys (52 percent) and 1.6 million girls (47 percent). North Brazil reported 115,000 indigenous students and 90,000 with special needs. The region has 18 percent of the total number of schools in Brazil (100,918).

⁴ According to the School Census 2021.

⁵ Ministério da Saúde, n.d.. Painel Coronavírus. Access: <u>https://covid.saude.gov.br/</u>.

⁶ Ministry of Economy, 2021. Notas informativas. Access: <u>https://www.gov.br/economia/pt-br/centrais-de-conteudo/publicacoes/notas-informativas/2021/ni-atividade-economica-pib-2020-e-perspectivas.pdf.</u>

performance in the industry and services sectors (-3.5 percent and -4.5 percent, respectively),^{7,8} combined with a weak performance in the livestock sector (2 percent). A gradual recovery began towards the end of 2020, but then growth contracted again in the second and third quarters of 2021. The combined effects of drought on agricultural production and exports, with the impact of input shortages on manufacturing placed Brazil in technical recession. In the short term, GDP growth is expected to slow to 0.9 percent in 2022 and is subject to significant downside risks. High inflation, unemployment, and a shrinking household income present a risk of reversing the progress made in reducing poverty in Brazil between 2000 and 2010. In fact, poverty is estimated to have increased to about 15.7 percent in 2021 (up from 12.8 in 2020), as emergency transfers to support the poor were reduced.

3. Unemployment rates also increased disproportionately among the poor during the pandemic, especially in the Northeast region where a higher incidence of poor and vulnerable population. In 2019, all 16 states in North and Northeast Brazil had lower GDP per capita than the states in the South, Southeast, and Center-West. Maranhão and Piauí had the lowest GDP per capita at R\$6,800 and R\$8,200, respectively (expressed in purchasing power parity terms from 2010).⁹ The North and Northeast also have the lowest mean wages compared to other regions in Brazil. In 2020, the mean monthly wage in North and Northeast was R\$1,814 and R\$1,751, respectively, while it reached R\$2,793 in the Southeast.¹⁰ In the second trimester of 2021, the unemployment rate reached 14.1 percent in Brazil. Vulnerable families in Northeast and North regions were the most affected. In the second trimester of 2021, the highest unemployment rate was observed in Pernambuco (Northeast, 21.6 percent), while the lowest rate was observed in Santa Catarina (South, 5.8 percent). From the last quarter of 2019 to the second quarter of 2021, the Northeast was also the region with the heaviest wage loss reaching -11.4 percent compared to -8.9 percent in the South. These impacts of the COVID-19 pandemic on the labor market disproportionately affected women. While 11.2 percent of men were unemployed in the second trimester of 2021, the rate for women was 17.1 percent.¹¹

4. **Low labor productivity impairs a faster economic recovery in Brazil.** The Human Capital Index (HCI)¹² estimates the productivity of a child born today when he or she reaches the age of 18 if the prevailing education and health conditions remain the same. The forthcoming Brazilian Human Capital Review calculates the HCI for Brazil and estimates that an average Brazilian born in 2019 is expected to achieve only 60 percent of his/her full potential, similar to Argentina and Colombia. Preliminary estimates considering the COVID-19 impacts in the HCI suggest a dramatic decrease. Future labor productivity will be reduced by 9 HCI points (or approximately 15 percent) relative to the HCI 2019. In a pessimistic scenario, this means that Brazil reverts to pre-2007 productivity levels. Additionally, a child born in the

⁷ IBGE, 2021. Access: <u>https://censos.ibge.gov.br/2013-agencia-de-noticias/releases/30165-pib-cai-4-1-em-2020-e-fecha-o-ano-em-r-7-4-</u>

trilhoes.html#:~:text=IBGE%20%7C%20Censo%20Agro%202017%20%7C%20PIB,s%C3%A9rie%20hist%C3%B3rica%2C%20iniciad a%20em%201996.

⁸ Fundação Getúlio Vargas (FGV) highlights heterogeneity in the growth rates for different types of industry. For the production of capital goods, for example, grew 15 percent above the pre-pandemic rates, while the production of durable goods is growing 21.8 percent below the level observed in February 2020.

⁹ IBGE, 2019. PIB per Capita Estadual. Retrieved from: <u>http://www.ipeadata.gov.br/</u>.

¹⁰ This refers to real average income per month (PNAD, 2020).

¹¹ This refers to real average income per month (PNAD, 2020).

¹² The HCI has three main components: (i) quality and quantity of schooling (education); (ii) child survival rates (survival), and (iii) adult mortality rates and stunting (health).



North and Northeast Brazil is only able to achieve slightly above half of his/her full potential productivity. That is: 8-9 HCI points below the Southeast region. The pandemic tends to significantly increase these regional differences in labor productivity. Importantly, these simulations indicate that the education component would be the most affected by the pandemic, falling more than 10 percent from 2019 to 2021. It is therefore crucial to prioritize a national strategy that will recover and accelerate the human capital losses, as the COVID-19 pandemic is jeopardizing at least a decade of progress in human capital accumulation in Brazil.

5. The proposed Operation has also important synergies with the Country Partnership Framework (CPF) for the Federative Republic of Brazil for FY18-FY23 (Report No. 113259-BR, discussed by the Board of Executive Directors on May 16, 2017). Education is highlighted as a key strategic sector in the CPF's focus area 1: "fiscal consolidation and government effectiveness," which seeks to "promote fiscal adjustment without hurting the poor." The activities of this Operation focus on vulnerable students in the least privileged regions of Brazil, which align with the CPF's goal of protecting the poor and vulnerable at a time of macroeconomic and fiscal instability. Similarly, by reinforcing education management information systems within underprivileged municipalities in Brazil (likely the most inefficient), the Operation also supports the CPF aim of "increasing efficiency with equity." Lastly, the activities of this operation aim to support the use of information and data to improve resilience in education management.

6. In particular, this Operation is anchored in the CPF objective 1.3 "increase effectiveness of service delivery in education." Objective 1.3 stresses the importance of (i) addressing "poor quality and access gaps in education." This operation addresses "poor quality" by implementing Observatories of School Dropouts to coordinate anti-dropout programs (Student Active Search program, Early Warning Systems, and School Dropout Call Center) and by integrating learning recovery programs such as Personalized Tutoring, Socioemotional Initiative, and Adaptive Learning Platforms into Brazil's most vulnerable schools. With regard to "access gaps," this operation aims to strengthen local capacity by providing decentralized technical teams to implement federal programs. For this reason, the Operation is also aligned with CPF objective 1.3 "fiscal adjustment will require refocusing on improved efficiency." In its attempt to help the education networks to recover from COVID-19 impacts, this Operation addresses the CPF objective of "creating human capital needed to drive an increase in productivity," which is also aligned with the World Bank's twin goals of eliminating extreme poverty and boosting shared prosperity.

7. The proposed Operation complements the ongoing Upper Secondary Reform in Brazil Program for Results (P163868, Loans 8812-BR and 8813-BR), which brings positive synergies to World Bank support. With these two operations running simultaneously, the World Bank would be positioned as a key partner of the GoB by supporting national programs at all education levels. Many activities included in the Upper Secondary Program for Results (PforR) also reduce the COVID-19 impacts on education. An additional advantage of the World Bank's engagement in this Operation is the familiarity of the Ministry of Education (Ministério da Educação, MEC) with the PforR instrument, the necessary requirements and procedures associated with a World Bank operation of this type. Since the proposed Operation has the same hybrid structure as the Upper Secondary Reform Operation (i.e., PforR with an Investment Project Financing technical assistance component), government counterparts and the Program Management Unit (PMU) are already knowledgeable with World Bank procedures, thereby reducing the need for training and concomitant delays. The Project also complements the project Income Support for the Poor



affected by COVID-19 Project (P174197) managed by the Ministry of Citizenship, which supports the expansion of Bolsa Familia CCT program with the objective of providing income support to families with children in school-age provided they are enrolled in school.

Sectoral and Institutional Context

8. **The GoB has been implementing a systematic approach to recover from COVID-19 impacts on human development**. The GoB put forward a large, targeted, and time-bound fiscal package focused on social protection, health, and education to counterbalance COVID-19 impacts on the social sectors. Education spending increased after the MEC passed a legislation to address the COVID-19 crisis by transferring more than R\$1 billion directly to schools to deliver free school meals for vulnerable students and families. In an additional action, more than R\$720 million were also invested to improve the sanitary conditions of 105,000 schools and to develop and implement a centralized platform to monitor the number of COVID-19 cases in schools.¹³ Schools in North and Northeast Brazil is facing four main issues to recover from COVID-19 impacts on Education: (i) Schools closures; (ii) School dropouts; (iii) Learning Losses; and (iv) Lack of internet connectivity. Each point is summarized below.

School Closures

9. **Few countries in the region kept their schools closed as long as Brazil did during the COVID-19 pandemic**. A survey conducted by the MEC in 2020¹⁴ reported that public schools remained closed for 287.4 days on average (or about 9.5 months) while private schools closed for 247.7 days (about 8 months), representing a 40-day public-private difference. Compared to the rest of Brazil, public schools in North and Northeast regions remained closed for a longer period on average. The five states with the longest closures are all located in North and Northeast. Bahia had the longest school closures (366.4 days on average), followed by Roraima (349.4 days), Rio Grande do Norte (336.5 days), Acre (332.7 days) and Amapá (332.4 days). Such a prolonged period of school closures has multiple consequences, among them: (i) increased school dropout rates; (ii) large learning losses and inequality; (iii) negative impacts on socioemotional skills; (iv) the need to reinforce and accelerate foundational learning; and (v) the need to make fragile school networks ready for current and future natural disasters affecting education.

10. In addition to the COVID-19 related disruptions in education, the link between climate change events and school closures was evident in North and Northeast Brazil. Schools in these regions already witnessed the effects of climate change events on school closures before the COVID-19 pandemic started. In 2019, school closures occurred more often in North and Northeast Brazil than in any other region in Brazil (21 percent versus 12.5 percent), and climate events such as floods, droughts, and landslides were the cause of school closures for 13.4 percent of schools in the North and 17.1 percent in the Northeast, representing 17.7 days without classes on average (compared to 11 days in the rest of Brazil).

School Dropouts

11. **As schools gradually reopen, vulnerable students are less likely to return to and stay in school.** Even before the COVID-19 pandemic, school drop out was a central challenge for the education system,

¹³ The platform can be accessed at <u>https://painelcovid-seb.mec.gov.br/.</u>

¹⁴ The questionnaire for school principals during the pandemic can be accessed at <u>https://painelcovid-seb.mec.gov.br/questionario-censo-escolar-2020/index.html.</u>

as were regional inequalities. In 2019, for example, the average drop-out rate in lower secondary was 5.9 percent in North and Northeast Brazil, well above the rate of 3.5 percent in the Southeast region. The COVID-19 pandemic is worsening these numbers. According to the IBGE, nearly 1.4 million school-age students between 5 and 17 years old were out of school in 2021,¹⁵ half of which were from North and Northeast Brazil. The costs of leaving school prematurely will have direct implications for the individual's and society's ability to recover from the effects of the COVID-19 pandemic given that school drop-out is associated with a lower probability of future employment, lower wages,¹⁶ and higher involvement in crime.¹⁷ In monetary terms, studies using local data estimate that dropping out of school costs Brazilian society approximately R\$395,000 per person.¹⁸ In this context, bringing students back to school is the most important education challenge that was exacerbated by the pandemic.

12. In North and Northeast Brazil, girls are less likely to return to school at the lower secondary level. When one considers the share of students in 6th grade that drop out in the 2019 School Census, boys tend to drop out more than girls. Using 2019 data, the dropout rate for boys in 6th grade in North and Northeast was 4.3 percent, while for girls it was 3.0 percent. However, girls from the same regions have a slightly higher chance of dropping out of school than boys in 9th grade (3.2 percent versus 3.0 percent for boys).¹⁹ Being at home during the pandemic might also affect girls' and boys' capacity to return to school by increasing, for example, the incidence of gender-based violence (GBV), especially domestic violence. A national survey found that 21.9 percent of 13- to 17-years-old girls in the North and 21 percent of girls in the Northeast experienced physical violence by their mothers, fathers, or guardians at least once in 2019. For boys in the North, this number is 19.6 percent, and in the Northeast this number is 20.1 percent. GBV and domestic violence should be considered when addressing the gender gap in drop out rates, particularly in vulnerable areas such as North and Northeast Brazil.

Learning Losses

13. Once students return to school, a second challenge is implementing adequate strategies to accelerate and recover from the learning losses inflicted by the pandemic. Even before the COVID-19 pandemic, only a small fraction of Brazilian students achieved adequate levels of learning for their grade. The 2019 national learning assessment, *Sistema de Avaliação da Educação Básica* (SAEB), demonstrated that only 19 percent of all students in a typical 9th grade public school had an adequate learning level. According to World Bank simulations,²⁰ there could be an increase of up to 70 percent in the proportion of 10-year-old Brazilian students unable to read a simple paragraph. Vulnerable students from North and Northeast Brazil were significantly less likely to know how to read and write after the pandemic started: the percentage of poor children in the Northeast unable to read and write was already 44.3 percent in 2019 and reached 59.7 percent in 2021, representing a 15.4 percentage point increase.

14. There is considerable evidence that learning inequality will also increase among students attending the same school. According to the 2019 SAEB, the score differential between the quintiles

¹⁵ IBGE, 2021. Pesquisa Nacional por Amostra de Domicílios Contínua 2021 – second trimester.

¹⁶ Adelman and Szekely, 2016.

¹⁷ Cook and Kang, 2016.

¹⁸ de Barros, R. P., 2021. Consequências da violação do direito à educação. Editora Autografia.

¹⁹ Censo Escolar, 2019.

²⁰ World Bank, 2021. Acting Now to Protect the Human Capital of Our Children: The Costs of and Response to COVID-19 Pandemic's Impact on the Education Sector in Latin America and the Caribbean. World Bank, Washington, DC.



representing the highest and lowest performing students in the same schools in North and Northeast Brazil was, on average, 110 SAEB points for mathematics and Portuguese.²¹ Considering that students gain around 20 SAEB points per year on average, this learning gap is equivalent to about 5 years of learning. Given that students from economically fragile backgrounds were the most susceptible to learning loss during the pandemic, the direct consequence is a strong increase in learning inequality within schools. Addressing learning recovery and inequality, while seizing opportunities to improve learning in the longer-term, is imperative for Brazil.

Lack of Internet Connectivity

15. The COVID-19 pandemic highlighted connectivity barriers both in schools and in students' homes that impaired learning, especially in North and Northeast regions of Brazil. According to the 2020 School Census, only 60 percent of public schools in Brazil have interne. This situation is even more serious in North and Northeast Brazil, where internet connectivity is only available in 48.5 percent of public schools (broadband in only 39 percent). Data from the Medidor Educação Conectada showed that, out of 49,259 schools where connectivity speed was measured (of which 11,600 were in the Northeast and 4,579 were in the North), the average download speed was less than 33 Mbps, much higher than the North (15 Mbps on average) and similar to the Northeast (28 Mbps).²² These low levels of internet connectivity in North and Northeast Brazil may explain why only around 33 percent of public schools use the internet for learning while in other regions these percentages exceed 55 percent. Data on student access to internet at home also exposes large regional inequalities. While in the South and Southeast more than 66 percent of lower secondary students have a computer at home, 42.6 percent have one in the North, and only 36.8 percent in the Northeast, according to SAEB 2019. The regional inequalities in internet connectivity, and in the access to remote and hybrid learning among schools and students, point out to larger learning losses due to the COVID-19 pandemic in North and Northeast Brazil and constrain learning recovery and acceleration in the longer-term.

16. In addition to the impacts of lack of internet connectivity and unequal access to remote and hybrid learning, the pandemic directly affected students' socioemotional skills. School closures and social distancing measures deprived children of social and cognitive stimuli. Children also experienced stress originating from situations such as losing a relative, food insecurity, and economic hardship. Research largely attests that acquiring socioemotional skills is of fundamental importance for youth, especially while their brain is still developing.²³ This is particularly relevant as evidence suggests that parents from vulnerable families prioritize the education of their older children.²⁴ Unmotivated students rarely return to school or learn properly.

17. The multiple and concurrent impacts of COVID-19 on education outcomes, combined with the ongoing economic crisis, created an enormous demand for better education management in school

²¹ While the quintile representing the lowest performing students have, on average, a proficiency of 192.20 in mathematics and 190.26 in Portuguese, the top quintile performs around 60 percent better, with average scores of 305.9 in mathematics and 306.9 in Portuguese.

²² Medidor Educação Conectada is a software installed in school computers to measure the speed of internet. It can be accessed here: https://medidor.educacaoconectada.mec.gov.br/.

²³ Yoshikawa et al., 2020.

²⁴ World Bank, 2020.



networks. The capacity of the education system to recover quickly from the impacts of COVID-19 depends on how effectively municipal and state governments manage their school networks. A sustainable recovery of learning losses requires the capacity to measure and monitor progress through learning assessments. Data can be used to optimize decision-making and therefore build resilience on education management. In addition to recovering and accelerating learning, school networks must also build resilience by preparing to face future natural disasters and crises that cause school closures or disruptions in learning. Local governments must, for example, monitor student enrollment closely to avoid new upsurges in dropout rates, manage the quantity and the quality of school meals as a mean of better integrating schools into the social protection system, and offer efficient school transportation for all students, regardless of their distance from school.

18. The GoB is preparing a national program to mitigate the impacts of COVID-19 pandemic in education. The COVID-19 recovery response is a comprehensive strategy that aims to address the most significant impacts inflicted by the pandemic on education. The program is structured to combat the expected increase in school drop out rates, to promote recovery of learning losses, accelerate learning, and prepare local school networks to deal with future natural disasters and crises. Using this rationale, the GoB designed a program with the World Bank to support North and Northeast Brazil in implementing a package of recovery policies. The selection of these two regions is justified by (i) their present low local capacity to implement learning recovery policies in a sustainable manner, (ii) their economic and social vulnerability, and (iii) regional inequality. The proposed Operation will institutionalize federal government's financial and technical efforts to systematically help municipal and state Secretariats of Education to recover from COVID-19 impacts. In this context, the GoB selected the following programs to be supported by the World Bank: Programa Brasil na Escola (PBE), Educação e Família, Programa Inovação Educação Conectada (PIEC), the Initiative under the Law 14.172, Laboratórios de Criatividade e Inovação para a Educação Básica (LabCrie), the Ecosystem and Integrated Education Management Platform.

19. The rationale for the selection of the programs to be supported by the proposed operation is based on the following criteria:

- a. The strategic relevance to school drop out and learning recovery, which are critical areas reflected in both the impact diagnosis and the COVID-19 response plan.
- b. The strategic relevance to the priority areas of engagement as reflected in the Brazil CPF and the World Bank's commitment to: (i) address short- and medium-term challenges associated with the COVID-19 pandemic, focusing particularly on poor and vulnerable populations; (ii) address climate change challenges, focusing particularly on the links between public health and environmental risks and public sector management improvements; and (iii) support institutional strengthening and the implementation of innovative practices that could be replicated within Brazil and in other countries.

Other programs in the COVID-19 response policy that are not included in the program (PforR) but supporting its achievement.

a. Direct School Cash Program (PDDE) and Articulated Action Plans (*Plano de Ações Articuladas*, PAR). In these activities, MEC is responsible for intergovernmental transfers

from the federal government to schools and the states' and municipalities' secretariats of education. The transfers are discretionary, and the schools and subnational governments are held accountable for processing the contracts and payments after applying for the funds. Small and poor municipalities face difficulties applying and implementing the interventions because there is limited technical capacity to design projects, complete the application processes, carry out accounting, and oversee execution.

b. Brazilian Fund for the Development of Basic Education Financing (Fundo de Desenvolvimento da Educação Básica - FUNDEB). FUNDEB is the primary source of public education financing at the pre-university level in Brazil, benefiting over 38 million students enrolled in schools managed by state and municipal governments. In 2021, the total amount transferred by FUNDEB was R\$208 billion, which the federal government's contribution was approximately R\$22.1 billion. The recent amendment on the Brazilian constitution (Emenda Constitucional 108/2020, EC108) increased federal contribution, made it more equitable, and established a results-based financing component based on the experience of Ceará's education incentive mechanism.²⁵ In summary, the main changes were: i) increase the federal top-up every year from 12 percent until 23 percent by 2026; ii) improvement in regional equity as 10.5 percentage points of the additional funds are transferred for the municipal and state school networks with the lowest spending per student, rather than by state, as it happens with the first 10 percent of the federal contribution; iii) allocation of 2.5 percentage points out of the 13 percent additional federal top-up to transfers to school networks according to improvements in education results; iv) change in the constitutional article related to the transfer of the main state tax (ICMS) to municipalities linked to improvements in education results, i.e., making the Ceará's results-based model mandatory to all states. The reform of FUNDEB is the main incentive mechanism to promote cooperation between the federal, state and municipal governments on the implementation of federal education policies, including COVID-19 learning recovery strategies.²⁶

PforR Program Scope

20. The proposed Operation aims to support the Brazilian COVID-19 response program, a systematic approach to COVID-19 recovery that addresses multiple education outcomes. The program focuses on North and Northeast Brazil and has two main components: (i) "Recovery," which focuses on school drop out rates and learning losses caused by school closures, as well as on unequal access to remote learning in primary and lower secondary education; and (ii) "Resilience and Capacity Building," which strengthens the capacity of subnational governments to cope with the consequences of the current pandemic and future natural disasters, as well as on accelerating learning progress. Under the second component, the MEC is implementing a series of actions in collaboration with states and municipalities

²⁵ The Ceará's results-based financing mode redistributes 18% of the funds according to education results and now with the constitutional change at the national level, all states will be obliged to have at least 10% (and up to 35%) of the transfers linked to education outcomes. v) Establishment of a minimum value of spending per student.

²⁶ The FUNDEB legislation mandates that in each state, 20% of the revenues collected by the main state and municipal taxes are set aside, and the resources are redistributed to the school networks (state and municipal) based on student enrollment (equalization within each state). The federal government transfers additional resources to the states with the lowest levels of spending per student each year (equalization between states). This top-up is calculated as a tenth of the total amount raised by the 27 state funds and is distributed to the school networks (state and municipal) in these states.

to: (i) address the low institutional and technical capacity of local Secretariats of Education to implement a systematic COVID-19 response in the sector; and (ii) improve education management and build resilience. In this context, the program has been designed with a clear set of interlinked policies, where each component is self-contained yet simultaneously part of a coherent and comprehensive strategy.

21. **Component 1 (PforR, US\$225 million): Recovery.** Component 1 supports government policies in three Results Areas:

- a. **Results Area 1: Recovery from School Dropouts** This Results Area promotes recovery from school dropouts by implementing a structure to coordinate three anti-dropout programs:
 - Activity 1: National and State Observatories of School Dropouts (OSD). This activity supports the implementation of one national and 15 state observatories of school dropout in North and Northeast Brazil (out of 16 states in the region). This Observatories will coordinate three anti-dropout policies: (i) the Student Active Search Program (*Sistema Presença*), which uses a centralized platform to guide local governments in the active search for students that did not (re)enroll in public schools; (ii) the School Dropout Call Center (*Disque 100 Brasil na Escola*), a hotline for community members to notify authorities of out-of-school children; and (iii) the implementation of an early warning system in schools.
 - **ii.** Activity 2: Early Warning System (SAP). The early warning system aims to (i) make schools proactively identify students at high risk of dropping out, disaggregated by sex, and (ii) offer personalized interventions while the students are still in school. This activity has four steps combining qualitative and quantitative information to identify students at high risk before dropping out of school.
 - **iii.** Activity 3: Education and Family Program (*Educação e Família*). The aim of the Education and Family Program is to unite families and schools in their efforts to reduce drop-out rates. For that, the program elaborates school-community engagement activities to increase student and family awareness on the importance of education and having a life project. The activities supported by the program will consider strategies for behavioral and attitude change of students and their families. The Operation will specifically support training on social cognitive theory.
- b. Results Area 2: Recovering from Learning Losses, Offline This Results Area 2 promotes activities to recover learning losses in schools. These strategies are called "offline" because they require students to physically be in school.
 - i. Activity 1: Personalized Tutoring (APA). This activity is an approach that adjusts teacher instruction levels by reorganizing students in small groups with similar learning difficulties. This strategy provides personalized tutoring based on foundational skills in mathematics and Portuguese during 2 weeks with structured materials designed to support each group of students. This policy is the main learning recovery strategy implemented by the GoB that is currently being expanded to primary schools in North and Northeast Brazil.
 - **ii.** Activity 2: Socioemotional Initiative (SIS). This program focuses on promoting structured discussion groups based on Cognitive Behavioral Therapy (CBT). The aim is

to rebuild students' socioemotional skills after the pandemic and to incentivize them to learn effectively. This initiative provides structured activities and training to assist local monitors in implementing the strategy. The structured activities to be undertaken by SIS will include discussions about GBV prevention, equitable relationships, climate change and natural disasters among others.

- c. **Results Area 3: Recovering from Learning Losses, Online -** Results Area 3 aims to support the national COVID-19 response program in three activities related to connectivity and hybrid learning. These strategies are called "online" because they do not require students to physically be in school.
 - i. Activity 1: Internet Connectivity at Schools. The first step in implementing hybrid learning models is to ensure that schools have adequate connectivity. The Operation supports the PIEC expanding internet coverage in schools, which is meant to help teachers enhance students' learning experience through pedagogical approaches using technology. The PIEC provides federal transfers and technical support to primary and lower secondary schools across Brazil in order to deploy, and expand, internet connectivity.
 - ii. Activity 2: Access to Computing Devices. Students also need to be able to access the internet for learning. This Operation finances the implementation of the Law 14.172, passed in 2021, which allocated R\$3.5 billion to the MEC purchase computing devices (tablets, SIM cards, and computers) for vulnerable students and teachers. These purchases are undertaken at the state level. The beneficiaries of this activity are students from vulnerable families (registered in CadÚnico) and from indigenous and quilombolas schools.²⁷
 - iii. Activity 3: Creativity and Innovation Lab for Basic Education (LabCrie). The Operation will also support the expansion of LabCrie to inner municipalities in North and Northeast Brazil. LabCrie aims to offer teachers and school principals a space for training on the use of technology at schools. The Operation will support LabCrie to offer trainings on Natural Disaster Risk Management to school principals and teachers.
 - iv. Activity 4: Education Solution Ecosystem. The education solution ecosystem is an initiative at the MEC that seeks to incorporate information technology (IT) solutions and initiatives available in the market to support schools to recover learning losses and school dropouts. This Operation supports the ecosystem by consolidating the various Education Technology (EdTech) solutions available in the market into a single platform, customized to the Brazilian context, and free to public schools. The Education Solution Ecosystem will include adaptive learning platforms. The development of a private market with consolidated and innovative solutions in a controlled environment is necessary to accelerate the development and diffusion of EdTech solutions in Brazil.

²⁷ http://www.planalto.gov.br/ccivil 03/ ato2019-

<u>2022/2021/Lei/L14172.htm#:~:text=LEI%20N%C2%BA%2014.172%2C%20DE%2010%20DE%20JUNHO%20DE%202021&text=Dis</u>p%C3%B5e%20sobre%20a%20garantia%20de,do%20par%C3%A1grafo%205%C2%BA%20do%20art.



22. **Results Area 1 will address a set of issues related to gender, inclusion, and climate change.** Considering that the underlying reasons for school drop-out vary according to gender, economic status, and the exposure to natural disasters and climate change events, the program will strengthen local capacity to deal with these various factors. First, on gender, the national observatory of school dropouts will have a specialist on school drop-out focused on gender and inclusion. A second activity develops protocols to guide local agents in approaching households, families, or students that dropped out due to gender-based violence, teenage pregnancy, severe climate change events and other related drivers. The third activity, on natural disasters and climate change, relates to the "dropout risk" questionnaire in the early warning system that maps the influence of "floods, droughts, tropical stroms, and landslides" on the risk of dropping out of schools (all of which can be direct consequence of climate change impacts that are projected to worsen). An activity in the early warning system related to gender comes from the "drop out triggering factors" questionnaire that identifies causes of drop-out related to household chores, gender-based violence, and risk of teenage pregnancy.

23. By emphasizing foundational cognitive and socioemotional skills, as well as the use of EdTech and systems, Result Areas 1, 2, and 3 of Component 1 go beyond recovering learning losses. The activities in these results areas will contribute to accelerate learning after the pandemic and build resilience to natural and climate change events. Students who have been observed to stop attending schools in cases of natural disasters (which are expected to be intensified in frequency and duration due to projected climate change risks) will be able to join remote school classes, while teachers will be more capable of delivering remote lessons. The learning solutions envisioned, such as the adaptive learning platforms, will further enhance these capabilities by allowing students to learn anytime, anywhere, at their own pace, and by following a uniquely crafted learning path adapted to their knowledge.

24. **Component 2 (IPF, US\$25 million): Resilience and Capacity Building.** The COVID-19 pandemic exposed the urgent need to incorporate risk reduction strategies into educational management that can withstand a range of disruptions. This component will strengthen the resilience and capacity of states, municipalities, and school networks to design policy responses, implement federal program, and counterbalance the impacts of the ongoing and upcoming learning crises, including future natural disasters induced by climate change. The proposed technical assistance will be divided in three main areas:

i. Subcomponent 2.1: Capacity Building (US\$ 8 million). This subcomponent aims to develop activities to build technical capacity and local ownership to strengthen the federal, state, and local education management. One of the implementation bottlenecks of federal programs is the lack of capacity of the local authorities to use the tools/kits/instruments and data appropriately. The main activities under this subcomponent are: (i) reinforcing the state observatories of school dropouts with highly technical consultants; (ii) designing training for school staff in SAP, APA, SIS,

and PIEC; (iii) Develop structured materials in partnership with municipal and state education networks to be used in APA; (iv) developing structured activities for SIS; (vii) creating decentralized technical teams to support municipalities in the management of PDDE and PAR;²⁸ and (vii) training local staff to implement projects.

- ii. Subcomponent 2.2: Education Solution Ecosystems and the Integrated Education Management System (US\$ 9 million). The principal objective of this subcomponent is to promote the integration, interoperability and expansion of MEC systems. The Integrated Education Management Platform aims to increase access to timely data and create a comprehensive education management process for the current and future crises. The Integrated Education Management Platform aims to incorporate MEC's systems into a single platform. The Education Solution Ecosystem includes the activities: (i) mapping the education solutions available in the national and international markets; (ii) purchase education solutions to recover learning losses and reduce school dropouts; (iii) adapting the solutions to the Brazilian Context, especially North and Northeast. The focus of these two platforms is on reducing inefficiencies and cost by standardizing management and evaluation of federal programs and promoting equity by offering education solutions to public schools.
- Subcomponent 2.3: Knowledge and Communication (US\$ 8 million). This subcomponent will iii. support activities that increase the quality of COVID-19 programs undertaken by the MEC. This subcomponent will benefit the Program, increase the scope to design targeted outreach and support measures to vulnerable groups and preparedness for ongoing and upgoing crisis. With regard to Results Area 1, these activities include: (i) update surveys for students and schools coordinators to identify issues correlated to the risk of school dropping out, including referral pathways for GBV cases; (ii) the development of protocols to guide local teams in approaching out-of-school students (and their households/families) that dropped out because of gender-based violence, teenage pregnancy, and other drivers; (iii) a longitudinal study on the reasons for dropping out; and (iv) a catalog of school policies to reduce school dropouts. With regards to Results Area 2, they include: (i) adaptation of structured materials and training protocols for APA targeting Indigenous and disabled students; (ii) development of structured activities to promote socioemotional skills in SIS; and (iii) designing training of tutor/professionals implementing these strategies. With regard to Results Area 3, they include: (i) impact evaluation of the Law 14.172 implementation, including an analysis on the expansion of access to connectivity; (ii) use of technology (digital education) for pedagogical practice, and inclusion; (iii) the development of material for courses on effective pedagogical practices, cultural and linguistic diversity and empowering girls in STEAM career paths for LABCries; (iv) the development and dissemination of protocols on effective natural disaster risk management in the education sector; and (iv) communication campaigns to facilitate implementation of federal programs related to learning recovery.

25. **Climate change activities in Component 2.** Component 2 will support activities to minimize anticipated risks from climate hazards and promote a sustainable, resilient, and climate-friendly learning environment. In this context, the Operation will improve the GoB's response to climate change through

²⁸ The PAR is multi-annual and multidimensional strategic plan that aligns the efforts and actions of the Ministry of Education, State and Municipal Departments into a list of objectives.



strengthening natural disaster responses at schools level, development of school-meal management systems (avoiding food waste), school-transport management systems (to optimize gas usage), and local capacity building. Moreover, leadership training for teachers and school principals at LabCrie will incorporate a program on climate hazards and natural disaster risk management and adaptation.

26. Incentives mechanism under Component 2. In complement to the FUNDEB framework to incentivize municipalities to participate in the learning recovery strategy of MEC, the activities under Component 2 will incorporate incentive mechanisms based on the participation in programs under Component 1. The adherence to Component 1 programs, as well as compliance with the program requirements, will serve as a mechanism of prioritization when it comes to which states and municipalities will benefit from the activities supported under Component 2. For example, the capacity building activities for school staff and the support of the decentralized technical teams will be prioritized in states and municipalities where the OSD was created first and the participation in SAP, Educação e Familia, APA, and SIS is high. Also, the technical support to the implementation of education technology interventions, will prioritize municipalities that comply with the technical requirement of the LabCrie, the Education Solution Ecosystems, and the Integrated Education Management System.

27. **Implementation support (US\$ 3,5 million).** The IPF component (Component 2) will support: (i) the Program Management Unit's (PMU) operational costs, basic equipment, and consumables; (ii) the implementation of the Governance Risk Assessment System to identify possible fraud in public expenditures and the Spend Analysis System for strategic procurement; (iii) capacity building in terms of internal controls and verification of DLIs; (iv) environmental and social (E&S) risk data such as the IPF environmental and Social Commitment Plan and the PforR Environmental and Social Action Plan; and (v) studies for participating agencies with emerging needs.

C. Proposed Program Development Objective(s)

Program Development Objective(s)

28. The Program Development Objective (PDO) is to support state and municipal governments in the North and Northeast regions of Brazil to: (i) recover from school dropouts and learning losses related to the COVID-19 pandemic, and (ii) strengthen education management in primary and lower secondary schools.

29. The following outcome indicators will measure achievement of the PDO:

- i. **PDO 1: Recovery from School Dropouts.** School dropout rates in sixth grade (disaggregated by sex).
- ii. **PDO 2: Recovery from Learning Losses, Offline.** Percentage of students from primary and lower secondary schools with low proficiency levels in Portuguese (disaggregated by primary and lower secondary).
- iii. **PDO 3: Recovery from Learning Losses, Offline.** Percentage of students from primary and lower secondary schools with low proficiency levels in mathematics (disaggregated by primary and lower secondary).



- iv. **PDO 4: Recovery from Learning Losses, Online.** Percentage of primary and lower secondary public schools reporting internet use for learning.
- v. **PDO 5: Data for Education Management.** Access to the data from Integrated Education Management Platform.

D. Environmental and Social Effects

 Legal Operational Policies
 Triggered?

 Projects on International Waterways OP 7.50
 No

 Projects in Disputed Areas OP 7.60
 No

Summary of Assessment of Environmental and Social Risks and Impacts (With IPF Component for PforR)

30. An Environmental and Social System Assessment (ESSA) was carried out considering Component 1 (PforR). The environmental and social risks of the Program are rated as moderate. Environmental effects are negligible, and the social effects tend to be mostly positive that far exceed the moderate potential risks and adverse effects. The Program's reputational and political risks are low. There are two main context-risk factors: "the digital divide" that may hamper opportunities of disadvantaged and vulnerable social groups to benefit from Program activities and the disparity of institutional capacities found among the municipalities in the Northeast and North regions. These risk factors are addressed by a series of activities already embedded in the Results Areas as well as the supporting technical assistance activities included in the IPF Component.

31. The environmental and social risk rating of the Component 2 (IPF) is rated Moderate. The Technical Assistance activities do not, themselves, have direct adverse environmental impacts. They are expected to have direct and positive impacts on the capacity of municipalities and states in the North and Northeast regions of the country to (a) implement the Ministry of Education's programs for expansion and improvement of public education networks, (b) enhance their managerial capacity and (c) monitor the learning performance and the retention of students of public schools networks. They would contribute to address some of the main challenges faced by the public education network in these backward regions of the country: weak learning performance of public school students, high levels of school dropout, and the "digital divide" (poor access to and limited pedagogical use of internet and digital technologies) and poor accessibility to child preschool and daycare centers, benefiting the most the students from low income families who mostly rely on the public education networks and from disadvantaged and vulnerable social groups (including Indigenous Peoples and Quilombolas).



E. Financing

32. The estimated government expenditures on COVID-19 response amount to US\$493.61 million over five years, of which the Bank program will finance 50.6 percent (US\$250 million). Component 1 is a PforR financing in the amount of US\$225 million intended to support the GoB's COVID-19 response program through federal transfers to municipalities and schools. The World Bank will finance 45.5 percent of Component 1. Component 2 is an IPF in the amount of US\$25 million intended to develop technical assistance that strengthens the program's implementation. The World Bank will finance 100 percent of Component 2.

Program Financing 2022–2026

Source	Amount (US\$, millions)	Percentage of Total
Government of Brazil	243.61	49.35
IBRD	250.00	50.64
Total program financing	493.61	100



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