



Report No: PAD5110

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

PROJECT APPRAISAL DOCUMENT

ON A

PROPOSED LOAN

IN THE AMOUNT OF US\$100 MILLION

TO THE

STATE OF MATO GROSSO

WITH THE GUARANTEE OF THE FEDERATIVE REPUBLIC OF BRAZIL

FOR A

MATO GROSSO RESILIENT, INCLUSIVE, AND SUSTAINABLE LEARNING PROJECT

October 4, 2023

Education Global Practice
Latin America and Caribbean Region

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CURRENCY EQUIVALENTS
(Exchange Rate Effective September 6, 2023)

Currency Unit = Brazilian Real (BRL)

BRL 1 = US\$4.97

FISCAL YEAR
January 1 – December 31

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**ABBREVIATIONS AND ACRONYMS**

ADSL	Asymmetric Digital Subscriber Line
AM	Accountability Mechanism
CBA	Cost-Benefit Analysis
CCT	Conditional Cash Transfer
CGE/MT	Internal Control Agency of Mato Grosso (<i>Controladoria Geral do Estado de Mato Grosso</i>)
COFOR	Training Coordination Department (<i>Coordenadoria de Formação</i>)
CPF	Country Partnership Framework
DRE	Regional Directorate of Education (<i>Diretoria Regionais de Educação</i>)
EEP	Eligible Expenditures Program
EMIS	Education Management and Information System
EVA	External Verification Agent
ESCP	Environmental and Social Commitment Plan
ESMF	Environmental and Social Management Framework
ESS	Environmental and Social Standards
EWS	Early Warning System
FEF	Front-end Fee
FIPLAN	Financial Management Information System (<i>Sistema Integrado de Planejamento, Contabilidade e Finanças</i>)
FGV	Getulio Vargas Foundation (<i>Fundação Getúlio Vargas</i>)
FM	Financial Management
FMA	Financial Management Assessment
FUNDEB	Basic Education National Fund (<i>Fundo de Desenvolvimento da Educação Básica</i>)
GBV	Gender-Based Violence
GDP	Gross Domestic Product
GHG	Greenhouse Gas
GRID	Green, Resilient and Inclusive Development
GRS	Grievance Redress Service
HCI	Human Capital Index
IBGE	Brazilian Institute of Geography and Statistics (<i>Instituto Brasileiro de Geografia e Estatística</i>)
ICMS	State Sales Tax (<i>Imposto sobre Circulação de Mercadorias e Serviços</i>)
IDEB	Index of Basic Education Development (<i>Índice de Desenvolvimento da Educação Básica</i>)
INEP	National Institute of Education Statistics (<i>Instituto Nacional de Estudos e Pesquisas Educacionais Anísio Teixeira</i>)
IPF	Investment Project Financing
IPP	Indigenous People Plan
IRI	Intermediate Results Indicator
LAN	Local Area Network
LMS	Learning Management System
M&E	Monitoring and Evaluation
MEC	Ministry of Education (<i>Ministério da Educação</i>)



MMS	Maintenance Management System
MT	Mato Grosso
NAP	National Adaptation Plan
NDC	Nationally Determined Contributions
NGER	SEDUC's Cabinet Office (<i>Núcleo Estratégico de Captação de Recursos e Avaliação de Projetos</i>)
NGO	Nongovernmental Organization
NPV	Net Present Value
PBC	Performance-Based Condition
PBE	Brazil at School Program (<i>Programa Brasil na Escola</i>)
PDO	Project Development Objective
PEE	State Education Sector Plan (<i>Plano Estadual de Educação</i>)
PeNSE	National School Health Survey (<i>Pesquisa Nacional de Saúde do Escolar</i>)
PFM	Public Financial Management
PLR	Performance and Learning Review
PMU	Project Management Unit
PNAD	<i>National Household Survey (Pesquisa Nacional por Amostra de Domicílios)</i>
POM	Project Operations Manual
PPSD	Project Procurement Strategy for Development
RBF	Results-Based Financing
SAEB	National Assessment of Basic Education (<i>Sistema de Avaliação da Educação Básica</i>)
SAAS	Sub-Secretariat for Systemic Administration (<i>Secretaria Adjunta de Administração Sistêmica</i>)
SAIP	Sub-Secretariat of Infrastructure and Property (<i>Secretaria Adjunta De Infraestrutura E Patrimônio</i>)
SAGE	Sub-Secretariat for Educational Management (<i>Secretaria Adjunta de Gestão Educacional</i>)
SAGP	Sub-Secretariat for People Management (<i>Secretaria Adjunta de Gestão de Pessoas</i>)
SAGR	Sub-Secretariat of Regional Management (<i>Secretaria Adjunta de Gestão Regional</i>)
SD	Standard Deviation
SEA/SH	Sexual Exploitation and Abuse/Sexual Harassment
SEDUC	Secretariat of Education of Mato Grosso (<i>Secretaria de Estado de Educação</i>)
SEP	Stakeholder Engagement Plan
SRGBV	School-Related Gender-Based Violence
SUTI	Superintendence of Information Technology (<i>Superintendência de Tecnologia da Informação</i>)
SURE	Superintendence for School Relations (<i>Superintendência de Relacionamento Escolar</i>)
SUDR	Superintendence for Regional Directorates (<i>Superintendência das Diretorias Regionais</i>)
TCE/MT	State Court of Accounts (<i>Tribunal de Contas do Estado de Mato Grosso</i>)
TLM	Teaching and Learning Material
TPD	Teacher Professional Development
VPP	Violence Prevention Plan
WASH	Water, Sanitation, and Hygiene



The World Bank

Mato Grosso Resilient, Inclusive, and Sustainable Learning Project (P178993)



TABLE OF CONTENTS

DATASHEET	1
I. STRATEGIC CONTEXT	6
A. Country Context.....	6
B. Sectoral and Institutional Context.....	7
C. Relevance to Higher Level Objectives.....	13
II. PROJECT DESCRIPTION.....	14
A. Project Development Objective	15
B. Project Components	15
C. Project Beneficiaries	23
D. Results Chain	24
E. Rationale for Bank Involvement and Role of Partners	27
F. Lessons Learned and Reflected in the Project Design	27
III. IMPLEMENTATION ARRANGEMENTS	27
A. Institutional and Implementation Arrangements	27
B. Results Monitoring and Evaluation Arrangements.....	28
C. Sustainability.....	28
IV. PROJECT APPRAISAL SUMMARY	29
A. Technical, Economic and Financial Analysis	29
B. Fiduciary.....	31
C. Legal Operational Policies.....	33
D. Environmental and Social.....	34
V. GRIEVANCE REDRESS SERVICES	35
VI. KEY RISKS	35
VII. RESULTS FRAMEWORK AND MONITORING	37
ANNEX 1: Implementation Arrangements and Support Plan	43
ANNEX 2: Performance-Based Conditions Disbursement and Verification Protocol	53
ANNEX 3: Activities to Address Climate Change.....	59

**DATASHEET****BASIC INFORMATION**

Project Beneficiary(ies) Brazil	Operation Name Mato Grosso Resilient, Inclusive, and Sustainable Learning Project		
Operation ID P178993	Financing Instrument Investment Project Financing (IPF)	Environmental and Social Risk Classification Moderate	

Financing & Implementation Modalities

☐ Multiphase Programmatic Approach (MPA)	☐ Contingent Emergency Response Component (CERC)
☐ Series of Projects (SOP)	☐ Fragile State(s)
☒ Performance-Based Conditions (PBCs)	☐ Small State(s)
☐ Financial Intermediaries (FI)	☐ Fragile within a non-fragile Country
☐ Project-Based Guarantee	☐ Conflict
☐ Deferred Drawdown	☐ Responding to Natural or Man-made Disaster
☐ Alternative Procurement Arrangements (APA)	☐ Hands-on Expanded Implementation Support (HEIS)

Expected Approval Date 26-Oct-2023	Expected Closing Date 31-Dec-2028
Bank/IFC Collaboration No	

Proposed Development Objective(s)

The objective of the Project is to improve the teaching practices, teachers' digital readiness, and schools' learning environments in the State of Mato Grosso.

**Components**

Component Name	Cost (US\$)
Component 1: Strengthen Pedagogical Interventions and School Management Strategies for Learning Recovery	21,000,000.00
Component 2: Transform Digital Infrastructure	20,000,000.00
Component 3: Create Green, Resilient, Inclusive, and Safer Schools	53,000,000.00
Component 4: Project Management, Training, Monitoring, and Evaluation	6,000,000.00

Organizations

Borrower: STATE OF MATO GROSSO
Implementing Agency: SECRETARIAT OF EDUCATION - MATO GROSSO

PROJECT FINANCING DATA (US\$, Millions)**Maximizing Finance for Development**

Is this an MFD-Enabling Project (MFD-EP)? No

Is this project Private Capital Enabling (PCE)? No

SUMMARY

Total Operation Cost	125.00
Total Financing	125.00
of which IBRD/IDA	100.00
Financing Gap	0.00

DETAILS**World Bank Group Financing**

International Bank for Reconstruction and Development (IBRD)	100.00
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Non-World Bank Group Financing

Counterpart Funding	25.00
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Borrower/Recipient

25.00

Expected Disbursements (US\$, Millions)

WB Fiscal Year	2024	2025	2026	2027	2028	2029
Annual	4.78	6.62	13.77	23.03	33.19	18.61
Cumulative	4.78	11.40	25.17	48.20	81.39	100.00

PRACTICE AREA(S)**Practice Area (Lead)**

Education

Contributing Practice Areas**CLIMATE****Climate Change and Disaster Screening**

Yes, it has been screened and the results are discussed in the Appraisal Document

SYSTEMATIC OPERATIONS RISK- RATING TOOL (SORT)

Risk Category	Rating
1. Political and Governance	● Moderate
2. Macroeconomic	● Moderate



3. Sector Strategies and Policies	● Moderate
4. Technical Design of Project or Program	● Substantial
5. Institutional Capacity for Implementation and Sustainability	● Moderate
6. Fiduciary	● Substantial
7. Environment and Social	● Moderate
8. Stakeholders	● Substantial
9. Other	
10. Overall	● Moderate

POLICY COMPLIANCE

Policy

Does the project depart from the CPF in content or in other significant respects?

☐ Yes ☒ No

Does the project require any waivers of Bank policies?

☐ Yes ☒ No

ENVIRONMENTAL AND SOCIAL

Environmental and Social Standards Relevance Given its Context at the Time of Appraisal

E & S Standards	Relevance
ESS 1: Assessment and Management of Environmental and Social Risks and Impacts	Relevant
ESS 10: Stakeholder Engagement and Information Disclosure	Relevant
ESS 2: Labor and Working Conditions	Relevant
ESS 3: Resource Efficiency and Pollution Prevention and Management	Relevant
ESS 4: Community Health and Safety	Relevant
ESS 5: Land Acquisition, Restrictions on Land Use and Involuntary Resettlement	Not Currently Relevant



ESS 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources	Relevant
ESS 7: Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities	Relevant
ESS 8: Cultural Heritage	Relevant
ESS 9: Financial Intermediaries	Not Currently Relevant

NOTE: For further information regarding the World Bank's due diligence assessment of the Project's potential environmental and social risks and impacts, please refer to the Project's Appraisal Environmental and Social Review Summary (ESRS).

LEGAL

Legal Covenants

Sections and Description

The Borrower shall carry out the Project in accordance with the Project Execution arrangement set out in Schedule 2 of the Loan Agreement.

Conditions

Type	Citation	Description	Financing Source
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I. STRATEGIC CONTEXT

A. Country Context

- 1. After a strong rebound in 2021 and 2022 from the COVID-19 crisis, driven by the vaccination campaign and federal income support to the poor, growth in Brazil remained solid in Q1 2023.** GDP grew 1.9 percent on a quarter-on-quarter basis in 2023, mainly driven by the strong growth in agriculture. On the demand side, household consumption and government consumption registered 0.2 percent and 0.3 percent growth, respectively, due to the fiscal stimulus and income transfer's support, and despite the monetary tightening and higher families' indebtedness. CPI-inflation moderated to 3.2 percent in June 2023 from 12.1 percent in April 2022, falling within the inflation target interval (3.25 percent with a +/- 1.5 tolerance interval). The Brazilian Central Bank (BCB) policy interest rate has been kept at 13.75 percent since September 2022, but it is expected to start decreasing in the second semester of 2023. The 12-months current account deficit stood at 2.5 percent of GDP in June 2023, fully financed by net FDI inflows at 2.6 percent of GDP. International reserves stood at 17.3 percent of GDP (US\$ 343.6 bn) in June 2023. The exchange rate appreciated between 2021 and June 2023, from R\$/US\$ 5.58 to R\$/US\$ 4.82. After the improvement observed in 2022, fiscal balances have shown signs of deterioration in 2023 as one-off revenues vanished and social transfers increased. The 12-month primary surplus of the public sector reached 0.24 percent of GDP in June 2023, from 1.3 percent in 2022. Public debt increased to 73.6 percent of GDP in June 2023, from 72.9 percent in December 2022.
- 2. With the economic recovery, poverty is expected to have gone down from 28.4 in 2021 to 24.3 percent in 2022, responding to increased job opportunities and expansion of the *Bolsa Família* cash transfer program.** A real increase in the minimum wages combined with a major overhaul of the *Bolsa Família* and a planned introduction of additional benefits to families with children are expected to drive poverty further down in 2023. Further reduction may occur as the economy recovers but despite the social gains of earlier decades poverty and disparities remain prominent in the lives of many Brazilians in the absence of stronger investments in human capital among the less well-off. Before the pandemic, one in five Brazilians were chronically poor; the onset of the pandemic widened pre-existing inequalities and today nearly half of Brazil's children – the country's future workforce - are growing up in poor households.
- 3. Brazil faces significant climate change impacts compounded by deforestation and land degradation.** Climate change is altering temperature and rainfall patterns in the country, resulting in reduced water availability and extended droughts, and could push another 800,000 to 3 million Brazilians into extreme poverty as soon as 2030. Continued deforestation in the Amazon and *Cerrado* biomes remains a matter of urgency, as it has increased land-use emissions - the main source of greenhouse (GHG) emissions in Brazil. Strengthening resilience to climate change and protection of natural assets, especially the fragile ecosystems of the Amazon and *Cerrado*, is essential for environmentally sustainable economic growth.
- 4. The pandemic had a strong negative impact on human capital accumulation.** Brazil is among the Latin American countries that suffered the longest public school closures, which is estimated to have increased learning poverty (the percentage of children unable to read and understand a simple text at age 10) from 48 percent in 2019 to 70 percent in 2021, disproportionately affecting the poor. As a result, COVID-19 is estimated to have reversed a decade-long trend of steady progress in the Human Capital



Index (HCI), which reached 0.60 in 2019.¹ Recent World Bank projections indicate that, in a realistic scenario, the HCI for Brazil could have fallen by 9.6 percent to 0.54 between 2019 and 2021.²

5. **Within Brazil, Mato Grosso (MT) is a large and diverse state, rich in natural habitats.** MT is the third largest state of Brazil, with an area of 903,357 km², and is one of the least densely populated (3.9 inhabitants/km²), holding only 1.6 percent of the Brazilian population (3.5 million people). The state has a diverse population. According to the Brazilian Institute of Geography and Statistics (*Instituto Brasileiro de Geografia e Estatística*, IBGE), MT has the fourth-largest indigenous peoples' communities, located in 59 municipalities. The state also ranked 19 out of 27 on the number of quilombos communities.³ MT also presents a unique environment with a variety of biomes.

6. **MT has shown good economic performance, but poverty remains high, and the state has been disproportionately affected by the COVID-19 pandemic.** MT is the fourth richest state in Brazil and one of the largest producers of soy worldwide. Between 2002 and 2019, MT experienced the highest GDP growth in the country, at 5 percent average annual growth compared to a 2.3 percent national average. More than half of its economic activity is associated with agriculture, and the state accounted for 28 percent of Brazil's grain production in 2020. Despite good economic performance, poverty in MT is still high and increased during the pandemic. Data from the Unified Registry for Social Programs (*Cadastro Unico*) indicate that around 12 percent of the population was living in extreme poverty, with under less than BRL 151 (US\$30) per month in 2020, an increase of 9.9 percent from 2018. As of December 5, 2022, MT reported 14,967 COVID-19 deaths since the beginning of the pandemic, representing 2.2 percent of the country's deaths (although MT accounts for just 1.6 percent of the country's population). Moreover, 73.4 percent of the population had received two doses of the COVID-19 vaccine and 38.6 percent at least one booster dose, figures lower than the national average.

B. Sectoral and Institutional Context

7. **Despite considerable investments in education over the past years, learning outcomes were already weak in MT before the pandemic.** In 2021, investment per student in MT was on average BRL 4,994.34 (US\$962) per year, greater than São Paulo, the richest state in Brazil, which spent BRL 4,138.64. Despite this high investment, according to the 2019 National System for Evaluation of Basic Education (*Sistema de Avaliação da Educação Básica*, SAEB), learning outcomes in Portuguese and mathematics for both primary and lower secondary education in MT were the lowest in the Central-West region and below the national average (including São Paulo). While several factors contribute to inefficiencies in the sector, poor coordination between municipal and state schools, suboptimal distribution, and size of schools throughout the vast state area, and the need to strengthen teachers' pedagogical skills and materials have been identified by the Government as important bottlenecks in education spending efficiency. The results

¹ The HCI is an index that captures the expected productivity of a child born today as a future worker. It ranges from 0 to 1 (with '1' signifying that a child born today can expect to achieve full health and full education potential) and has three main components: (a) quality and quantity of schooling (education), (b) child survival rates (child survival), and (c) adult mortality rates and stunting (adult health).

² World Bank. 2022. *Brazil Human Capital Review*. Washington, DC: World Bank.

³ A quilombo is a settlement founded by Afro-descendant people in Brazil and its construction process is directly related to the slavery regime (1550–1888) established in the country during colonization. *Quilombola*, or residents of quilombos, are descendants of enslaved Africans, known as maroons, who established their own maroon communities after fleeing slavery as a form of resistance.



of the state network in the 2019 Index of Basic Education Development (*Índice de Desenvolvimento da Educação Básica*, IDEB) were stagnating, with 43 percent of schools neither reaching the target nor improving IDEB scores.⁴ Furthermore, there are several learning inequalities within the state. SAEB results in MT show that the state network has lower performance than the municipal network on average and that the urban-rural achievement gap is significant. Learning levels are particularly weak in upper grades, with many students at level zero on the SAEB proficiency scale in Portuguese and mathematics in 9th grade, especially in rural areas.⁵

8. **Repetition and dropout rates in MT in upper grades are among the highest in the country.** The state network adopts an automatic promotion policy throughout primary education. Therefore, repetition (2.7 percent) is low compared to the national average (3.3 percent) and the Central-West region (4.6 percent). For lower secondary education, repetition rates for the MT state network (7.0 percent) are still lower than the national average (8.3 percent). However, repetition spikes as students move to upper secondary. Before the pandemic (2019), the MT state network had the highest repetition rate among Brazilian states in the first year of upper secondary education (10th grade), at 25.3 percent compared to the national rate of 14.5 percent. The state network also had the second highest dropout rate in the first year of upper secondary: 13.5 percent compared to the national rate of 7.0 percent.

9. **Schools in MT were closed for long periods during the pandemic, with unequal and low student engagement in remote learning.** Schools were closed for 260 days in MT,⁶ with the state network and most of the municipalities returning to face-to-face schooling only in mid-August 2021. According to the National Household Survey (*Pesquisa Nacional por Amostra de Domicílios*, PNAD) 2020, only 36 percent of upper secondary students engaged in remote learning during the pandemic, which also generated increased mental health challenges for students. The pandemic therefore increased dropout levels in MT and caused significant learning losses, aggravating its learning crisis.⁷ The summative assessment conducted by the Ministry of Education (*Ministério da Educação*, MEC) in 2021 shows that learning levels in MT reverted to pre-SAEB 2015 performance levels. For example, the performance of 5th graders in Portuguese and mathematics dropped to the equivalent of that of six years and eight years ago, respectively. For 12th grade students, the setback was of at least 17 years. In the coming months and years, MT needs to adopt urgent and decisive strategies to recover and accelerate learning. Overall, school closures and low engagement in remote learning resulted in learning losses or substantial learning lags

⁴ The IDEB ranges from 0 to 10 and considers promotion rates and learning outcomes in Portuguese and mathematics from the National Evaluation System of Basic Education (*Sistema Nacional de Avaliação da Educação Básica*, SAEB). Education networks (states and municipalities) and schools have targets to achieve; by 2022, Brazil should achieve a 6 on the IDEB scale, comparable to the education quality of developed countries.

⁵ The definition of learning levels comes from SAEB and are found at https://download.inep.gov.br/publicacoes/institucionais/avaliacoes_e_exames_da_educacao_basica/escalas_de_proficiencia_do_saeb.pdf. As indicated by the SAEB scaling, students in level zero require special support as they do not show the minimum content knowledge in the subject expected for the grade.

⁶ This is lower than the average for Brazil (285 days) but higher than other states such as Espírito Santo (229 days) and Amazonas (245 days). The statistics refer to the average number of days public schools were closed for primary, lower, and upper secondary education. Source: National Institute of Education Statistics (*Instituto Nacional de Estudos e Pesquisas Educacionais Anísio Teixeira*, INEP) questionnaire about school response during COVID-19—administered between February and May 2021 (<https://www.gov.br/inep/pt-br/areas-de-atuacao/pesquisas-estatisticas-e-indicadores/censo-escolar/pesquisas-suplementares/pesquisa-covid-19>).

⁷ Learning losses is the learning that did not take place during school closures as well as forgetting of previously acquired learning and lost potential future learning.



and an increased risk of dropouts due to lack of student motivation. The estimates for the state of São Paulo, for example, show that the risk of school dropout has increased by 365 percent in the wake of the pandemic.⁸ Initial data for MT shows that the dropout rate in the first year of public upper secondary schools, which was already at alarming levels pre-pandemic, increased by five times in 2021 compared to 2020.⁹

10. **Dropout, performance, and attendance vary significantly by gender.** In 2021, the dropout rate in the first year of upper secondary school was larger for boys than girls: while 4.4 percent of girls dropped out of schools, this rate for boys was 5.4 percent. Before the pandemic, the gender gap was more significant: in 2019, the dropout rate was 10.9 percent for girls and 15.8 percent for boys. Thus, the gender gap in dropout rates was reduced from 5 percentage points to 1 percentage point since 2019. This result indicates that either the policy of automatic promotion benefited more boys than girls or that, if automatic promotion benefits both genders equally, girls dropped out more than boys during the COVID-19 pandemic. However, the reasons for dropping out of school differ between genders. According to a 2020 report from UNICEF for Brazil, boys between 11 and 14 years old never answered "household chores" or "care for a family member" as reasons for not attending school.¹⁰ Among girls, 22.6 percent chose one of these options.¹¹ On performance, girls outperform boys in Portuguese, but they show lower learning outcomes in mathematics. In upper secondary public schools, 21.7 percent of girls have an insufficient score in Portuguese, while this number is 31.5 percent for boys. In mathematics, 45.5 percent of girls and 39.1 percent of boys in upper secondary in MT have an insufficient score.¹² Moreover, girls have a higher attendance rate than boys, and the Gender Parity Index (GPI)—the ratio of girls to boys enrolled in secondary school—was 1.05 in 2019.¹³

Deficiencies in teaching practices and school management strategies

11. **The Secretariat of Education of Mato Grosso (*Secretaria de Estado de Educação, SEDUC*) designed a Learning Recovery Plan in 2020, which focuses on individualized remedial learning activities in schools' learning labs to mitigate the impacts of the pandemic on student learning, but its implementation has been unequal.** Established in 2017, the learning labs offer after-school and personalized assistance to students with learning gaps in literacy, Portuguese, and mathematics. Currently, the learning labs operate in 450 schools of the state network, with 1,400 teachers providing support to: (i) 9,983 students in primary education; (ii) 23,777 in lower secondary education; and (iii) 7,338 in upper secondary education. There is, however, significant variation within schools in terms of the learning labs' operation and quality. In particular, many learning lab teachers lack specialized training in

⁸ Lichand, G., C. A. Dória, O. L. Neto, and J. Cossi. 2021. "The Impacts of Remote Learning in Secondary Education: Evidence from Brazil during the Pandemic." *Nature Human Behaviour* 6: 1079–1086.

⁹ Across Brazil, the dropout rates for 2020 were meager compared to previous years. The schools' automatic promotion, implemented during 2020, can explain this phenomenon. In 2021, the rates increased sharply: in MT, state upper secondary school dropout rates have risen from 0.8 to 4.9.

¹⁰ The sample size was 30,098 boys and 29,662 girls for the study. UNICEF, 2020. Out-of-School Children in Brazil. Access: https://www.unicef.org/brazil/media/14881/file/out-of-school-children-in-brazil_a-warning-about-the-impacts-of-the-covid-19-pandemic-on-education.pdf.

¹¹ Girls are also more susceptible to child marriage and teen pregnancy, which are additional factors that increase dropouts and the risk of not returning to school.

¹² SAEB, 2017.

¹³ World Development Indicators, 2019.



remedial education and accelerated learning techniques, many schools have inadequate learning environments and technology (as further described below), and the pedagogical materials and assessments used are not standardized. Providing adequate teacher training and materials and allowing schools to introduce personalized tutoring strategies would help foster best practices in teaching and support the implementation of the learning recovery plan.

12. **In 2021, SEDUC made a significant investment in pedagogical materials for students and teachers and in a learning assessment system.** After the reopening of schools, MT started the implementation of a priority program based on a five-year social impact bond contract with *Fundação Getúlio Vargas* (FGV). This includes (i) the development and distribution of structured learning materials for each learner in 3rd to 12th grades, aligned with the National Common Core Curriculum (*Base Nacional Comum Curricular*) for all subjects; (ii) the development of structured teacher guides, aligned with student learning materials, to support teachers in delivering their classes; and (iii) a 120-hour teacher training plan during each school year. The program also introduced a bimonthly formative assessment for all students in the MT state network and an end-year summative assessment to measure learning improvement. Preliminary evidence from the first semester of the program's implementation identified challenges related to teacher engagement and to the alignment of the learning materials' content to students' proficiency levels. The findings also outline the need to include further support and training to teachers and complementary actions to improve school management and school learning conditions. The activities supported by the proposed Project complement this main program of the MT government.

13. **Teachers in MT lack the training in teaching practices and coaching needed to tackle learning recovery.** The state network employs a large percentage of teachers with no pedagogical certification (46 percent in secondary education) and with short-term contracts (57 percent in primary education and 66 percent in lower secondary education). These teachers usually have less experience than those with longer-term contracts, receive no formal training, and generate a high level of turnover at the school level. In some municipalities, such as São José do Xingu and São José do Povo, all teachers are under short-term contracts. Consequently, many teachers in MT lacked effective pedagogical practices even before the pandemic. Given that the pandemic had uneven impacts on student outcomes, it is even more critical that teachers be able to effectively assess students' learning losses and adjust their instruction techniques to the appropriate learning level. They must also be prepared to support students' socioemotional needs. While the state has an ongoing teacher professional development (TPD) program, it usually consists of one-off, mostly theoretical training sessions that are not based on the teachers' specific needs and that lack follow-up actions to support the application of changes in teaching practices in the classroom. It is therefore necessary to design training programs that are more practically oriented and provide skills that allow teachers to identify individual student learning levels to ensure that they are qualified to attend to students' specific needs and to help them recover from their learning losses.

Gaps in digital readiness for teaching and learning

14. **Limited school internet connectivity hinders the attempts to modernize teaching and tackle the learning losses caused by the COVID-19 pandemic.** Although most state and municipal schools (96 percent and 87 percent, respectively) have internet connectivity, only 50 percent of state schools and 60 percent of municipal schools have broadband. Around 35 percent of state schools and 53 percent of municipal schools monitor the quality of their internet connection and, of these, only 22 percent and 30 percent, respectively, have a bandwidth greater than 20 Mbps—which is considered the minimum to



support adequate learning activities (meaningful connectivity).¹⁴ According to the 2020 school census (*Censo Escolar*),¹⁵ there is a significant digital gap between urban and rural schools; only 18.5 percent of rural schools have broadband connection compared to 64.7 percent of urban schools. Furthermore, even though state schools receive stipends to provide internet access for teachers and students and 548 urban schools provide internet access through asymmetric digital subscriber line (ADSL) technology, only 75 of 261 rural schools are able to provide internet access with the appropriate bandwidth through satellites.¹⁶ To enhance the quality of distance learning in MT, it will be important to upgrade the bandwidth of the current ADSL internet access through the extension of the fiber network in the metropolitan, urban, and rural areas, as well as increase internet access through satellite in rural schools where other technologies are not available.

15. **The effective pedagogical use of technological infrastructure and modern learning technologies will require the development of both teachers' and students' digital skills.** The provision of technological equipment alone will not achieve its intended purposes of enhancing learning. Capacity building for teachers and students to integrate learning technology effectively in the pedagogical process will be key to ensuring that the technology is used as a key resource to support learning recovery and acceleration. According to a 2017 EDUTEC study, most teachers were not trained to use technology in the classroom, although 82 percent of the teachers in state schools use computers (desktops, notebooks, tablets) in the classroom.¹⁷ Moreover, 43 percent of the teachers who use devices consider the equipment inadequate.¹⁸ Ensuring that teachers have the skills to use technology in the classroom will increase their adaptive capacity to continue teaching in a hybrid environment, in the event of any interruptions to schooling, including due to climate-related disasters.

16. **The SEDUC digital management system is outdated and inefficient, posing a challenge for managing human resources and student enrollment and transportation.** SEDUC's existing Education Management and Information System (EMIS) is based on a monolithic software architecture that is outdated and undocumented, making it difficult to improve the existing capabilities or add new functionalities without affecting its integrity. This outdated EMIS is used for teacher recruitment and allocation, which leads to errors in defining class sizes and distributing teachers, especially for mathematics and science. The system is also inadequate in addressing inefficiencies in the distribution of student enrollment, an important challenge in MT due to its large geographical area and low population density. Considering that 86 percent of schools are in urban areas, SEDUC struggles to implement an enrollment system that also efficiently benefits the 14 percent of students from rural areas. In parallel, SEDUC provides daily school bus service for 107,990 students (12 percent of total enrollees, of which 33 percent live in rural areas).¹⁹ Consequently, managing a school bus system for a small percentage of students who are geographically dispersed across rural areas can be quite costly (1.4 percent of current

¹⁴ <https://a4ai.org/>.

¹⁵ <https://analitico.qedu.org.br/>.

¹⁶ The ADSL is a communications technology that offers faster connection speeds over traditional telephone lines, compared to the connection speeds that dial-up internet provides.

¹⁷ See <https://cieb.net.br/relatorio-do-guia-edutec-avalia-adocao-de-tecnologia-para-fins-educacionais-em-14-estados-brasileiros-e-no-distrito-federal/>.

¹⁸ SAEB 2019.

¹⁹ <https://radareducacao.tce.mt.gov.br/extensions/radareducacao/censoMatriculas.html>.



expenditure in education).²⁰ Additional inefficiencies, such as an outdated teacher remuneration system, inefficient allocation of teachers, and limited fiscal space, along with the fact that 88 percent of total current expenditure on education is allocated to teachers' salaries, hamper the state's capacity to invest in learning resources and in the modernization and maintenance of the school environment.

Lack of safe, inclusive, green, and resilient learning environments

17. School closures and disruptions due to climate change shocks and natural disasters pose significant management challenges in MT, while also hampering health and learning. The education sector in MT is seasonally affected by disaster events that restrict access to educational facilities, such as floods, wildfires, landslides, and droughts, and these are expected to increase in frequency and intensity because of climate change. Waterborne diseases are also likely to become more common since high temperature increases the disease agents' survival and replication and floods can spread the disease agents faster.²¹ Water, sanitation, and hygiene (WASH) interventions have been proven effective in reducing water-related diseases.²² The lack of monitoring systems, however, does not allow an understanding of the magnitude of these climate-related impacts on learning or their relative weight (as compared to other causes) on dropout and learning. As a result, the lack of adaptiveness of schools to climate-related shocks contributes to learning losses in climate-affected areas, making improvement of the education sector's resilience to school closures an urgent priority. Investments in resilient infrastructure are also highly cost-effective: US\$1 invested in resilient assets generates US\$4 in benefits, since the resilient assets are less costly to maintain and repair.²³

18. MT's climate change challenges could also have an impact on educational performance. In certain periods, the temperature in Cuiabá has increased by 1.5°C when comparing 1931–1960 to 1991–2020,²⁴ and average annual temperatures are expected to rise by 1.7°C to 5.3°C by the end of the century due to climate change. Consequently, approximately 94 percent of schools resort to using air conditioning as the main ventilation in the classrooms. Rising temperatures are of increasing concern, especially for vulnerable groups such as children and the elderly.²⁵ Preliminary evidence from Brazil shows a causal effect between higher temperature and lower scores on the national high school upper secondary education (12th grade) exam used for college admissions.²⁶ In fact, a child who experiences temperatures two degrees above average is predicted to attain 1.5 fewer years of schooling than one who experiences average temperatures.²⁷ Moreover, according to the Integrated Disaster Information System, over the last

²⁰ There are currently 1,965 shared school bus routes that represent 41,862,836 km per year and an additional 1,232 state bus routes that represent 19,995,262 km per year. The total school transportation expense is shared between the state and the municipalities and represents an annual investment of over BRL 100 million.

²¹ Levy, K., S. M. Smith, and E. J. Carlton. 2018. "Climate Change Impacts on Waterborne Diseases: Moving toward Designing Interventions." *Curr Environ Health Rep* 5 (2): 272–282. doi:10.1007/s40572-018-0199-7.

²² <https://www.who.int/europe/news-room/fact-sheets/item/water-and-sanitation>.

²³ Hallegatte, Stephane, Jun Rentschler, and Julie Rozenberg. 2019. *Lifelines: The Resilient Infrastructure Opportunity*. Sustainable Infrastructure. Washington, DC: World Bank.

²⁴ The measurement used as a reference is the minimum temperature in each month. October temperature has increased 1.6°C and April and November temperatures have increased 1.5°C. The temperature increase was registered in all months. Source: Instituto Nacional de Meteorologia. 2022. *Normais Climatológicas do Brasil*. <https://portal.inmet.gov.br/>

²⁵ World Bank Group. 2021. "Climate Risk Profile: Brazil."

²⁶ Melo, A. P., and M. Suzuki. 2021. "Temperature, Effort, and Achievement: Evidence from a Large-Scale Standardized Exam in Brazil." Working Paper.

²⁷ PNAS 2019.



decade, the number of reported wildfires, floods, and droughts has increased by more than 50 percent.²⁸ These are expected to become more frequent and intense, posing additional threats to infrastructure and to the health and safety of teachers and students. The government of MT is willing to integrate a focus on the environment into the education sector's policies and reforms to address these expected changes.

19. **The school environment is also associated with not only its physical facilities but also its social climate, and in MT, ensuring safety is a challenge for schools.** MT is one of the five states with the highest rates of threats to teachers and principals in state public schools.²⁹ According to SAEB 2019 data, students came to class carrying a weapon in 26 percent of state schools, and 17 percent of schools experienced drug dealing events. Moreover, violence, bullying, and cyberbullying affecting students ages 13–17 in the school environment is multidimensional and have larger impacts among girls and residents of Cuiabá. The state lacks structured mechanisms to prevent school violence: only 34 percent of schools implement the SEDUC guidance to mitigate violence in schools, while 86 percent implement only sporadic actions. In addition to within-school violence, the lack of adequate infrastructure in and around schools adds to an unsafe environment. SAEB 2019 data show that 22.9 percent of schools have poor or inadequate lighting outside the school. The 2019 National School Health Survey (*Pesquisa Nacional de Saúde do Escolar*, PeNSE) report highlights that 11 percent of students did not attend school due to unsafe routes from home to school or from school to home in MT; proper infrastructure supporting students' safe access to school is thus especially important in MT considering that its schools are spread out across the state.

C. Relevance to Higher Level Objectives

20. **The proposed Project has important synergies with the Country Partnership Framework (CPF) for the Federative Republic of Brazil for FY18-FY23 (Report No. 113259-BR), discussed by the Executive Directors on July 13, 2017, and confirmed by the corresponding Performance and Learning Review (PLR, Report No. 143636-BR discussed by the Executive Directors on May 24, 2022).**

21. **The proposed Project is aligned with Brazil's national COVID-19 response policy supporting recovery from learning losses caused by the pandemic.** The National Learning Recovery Policy's (*Decreto* 11.079/22) objectives are to: (i) promote equity by supporting vulnerable schools; (ii) reduce the proportion of students with low learning levels; (iii) reduce dropout rates in primary and lower secondary schools; and (iv) strengthen education management at the local level to overcome the ongoing and future barriers, including those stemming from climate change and natural disasters.³⁰ The proposed Project also complements the Recovering Learning Losses from COVID-19 Pandemic in Brazil Program for Results (P178563), which brings positive synergies and places the World Bank as a key partner at the federal and state levels on the learning recovery agenda.

22. **The proposed Project will directly support the objectives of MT's State Education Sector Plan (*Plano Estadual de Educação*, PEE 2020–2024).** The PEE 2020–2024 focuses on the reduction of

²⁸ Event catalogue from Sistema Integrado de Informações sobre Desastres - S2ID (<https://s2id.mdr.gov.br/>).

²⁹ Brazilian Yearbook of Public Safety 2019.

³⁰ Vulnerable schools are those with lower education quality index (IDEB) and with more poorest students, measured by number of beneficiaries of CCT as well as indigenous and *Quilombolas* schools.



educational inequalities and the creation of mechanisms to strengthen collaboration between the state and municipal networks to improve the quality of education provision. The MT objectives are also aligned with the World Bank's RAPID Framework for Learning Recovery and Acceleration, which seeks to tackle the learning losses caused by the pandemic by supporting a contextually adapted learning recovery program incorporating key RAPID policy actions. The framework is based on five evidence-based policy actions: Reach all children, Assess learning, Prioritize the fundamentals, Increase the efficiency of instruction, and Develop psychosocial health and well-being.³¹

23. The proposed Project is aligned with Brazil's Nationally Determined Contributions (NDC) and its mitigation and adaptation efforts and is therefore consistent with Brazil's strategies on climate change. Brazil's NDC, submitted in 2015 and most recently updated in 2022, has a broad scope that includes mitigation, adaptation, and means of implementation. Brazil's adaptation strategy emphasizes the social dimensions of climate change and promotes inclusive and equitable climate action accordingly. The Project's activities would have a negligible impact on GHG emissions and are not likely to have an adverse effect on Brazil's low-GHG-emissions development pathways. Furthermore, Brazil's National Adaptation Plan (NAP) includes public policies and adaptation actions and strategies at different levels of government,³² including the state level, and across 11 sectoral and thematic strategies of which the Project will support capacity building on risk management for education sector personnel. In line with objective 2 "Coordination and cooperation between public agencies and society" and goal 2.1 of the NAP "Adaptation training strategy developed and implemented for diverse target audiences", the Project will support the adoption of mitigation and adaptation measures under the following initiatives of the NAP: (i) carry out awareness raising activities to mobilize society; (ii) train professionals and leaders working in strategic areas and with the most vulnerable groups; (iii) foster the production and dissemination of knowledge in adaptation by strengthening institutions and research groups that work in the area and encouraging the creation of new ones; (iv) provide technical support to the state and municipalities; and (v) foster integrated action between institutions and/or between subnational governments.

II. PROJECT DESCRIPTION

24. The proposed Project will be financed through a loan in the amount of US\$100 million, using an Investment Project Financing (IPF) with Performance-Based Conditions (PBCs) instrument. By supporting system-wide activities to improve teaching practices and foster better school management, the Project will promote recovery from COVID-19-related learning losses and accelerate learning progress in MT. In addition, it will build more conducive social and physical learning environments and narrow digital divides, thereby increasing the resilience of MT schools to climate-induced and natural events.

³¹ See in <https://thedocs.worldbank.org/en/doc/e52f55322528903b27f1b7e61238e416-0200022022/related/Guide-for-Learning-Recovery-and-Acceleration-06-23.pdf>.

³² Ministry of Environment. 2016. "National Adaptation Plan to Climate Change." Volume I: General Strategy. Brasilia: Ministry of Environment. https://www.gov.br/mma/pt-br/assuntos/climaozoniodesertificacao/clima/arquivos/pna_volume-i_en.pdf.



A. Project Development Objective

PDO Statement

25. The objective of the Project is to improve the teaching practices, teachers' digital readiness, and schools' learning environments in the State of Mato Grosso.

PDO Level Indicators

26. The indicators used to track progress on the achievement of project objectives are as follows:
- Percentage of 6th grade teachers with improved teaching practices in Portuguese and mathematics in the state network;³³
 - Student dropout rate in 10th grade in the state network (disaggregated by gender);
 - Percentage of teachers with improved digital skills;
 - Percentage of secondary students with access to sustainable, safe, inclusive, and resilient learning environments in the state network.³⁴

B. Project Components

Component 1: Strengthen Pedagogical Interventions and School Management Strategies for Learning Recovery (US\$21 million, disbursed against the achievement of two PBCs)

27. **Component 1 will support pedagogical and school management interventions to address students' learning recovery and acceleration.** The objective of this component is to support SEDUC's learning recovery and acceleration strategies through interlinked and evidence-based interventions. This component will focus on: (i) the design of pedagogical interventions tailored to address students' specific learning gaps and support students at risk of dropping out, creating a comprehensive approach at the school level to strengthen learning lab activities and an effective early warning system (EWS); (ii) the development of a new TPD program to improve pedagogical techniques that boost learning recovery; and (iii) support to the implementation of a collaborative system between SEDUC and MT municipalities by strengthening policies for better school management, and school accountability. The component will be disbursed against two PBCs that will reflect the capacity of the state to provide technical assistance to implement a learning recovery strategy for all its primary and secondary schools and promote cooperation with municipal networks.

³³ Improvements in teaching will be measured with the TEACH instrument. It is a free classroom observation tool that provides information about the teaching practices inside classroom. The tool is designed to be used in primary classrooms (1st to 6th grades) and was designed to help low- and middle-income countries track and improve teaching quality.

³⁴ SEDUC developed standards for the physical learning environments based on qualities and characteristics that can help improve education outcomes. Twelve factors related to sustainable (i, ii, iii), resilient (iv, v, vi, vii), inclusive (viii, ix, x), and safe (xi, xii) schools will be monitored to track these standards in the schools that will benefit from the project's interventions. The factors are (i) reduction of thermal transmittance of walls, windows, and roofs; (ii) solar energy panels; (iii) waste management of constructions and maintenance of schools; (iv) fire risk management and training; (v) atmospheric discharge protection system; (vi) drinking water; (vii) treated sewage, (viii) national accessibility physical standard; (ix) learning laboratory room for students with learning gaps; (x) resource room for special education students, (xi) violence prevention plan implemented, and (xii) adequate WASH facilities. Factors (ii), (iii), and (xii) do not apply to indigenous schools. Factor (ii) does not apply to *Quilombolas* schools.



28. Subcomponent 1.1: Promote learning and schooling recovery interventions (US\$16 million).

This Subcomponent will promote an effective response to recover from learning losses and reduce the dropout rates of lower and upper secondary students in state schools. The first of three activities will be the strengthening of learning labs in schools of the state network. The second will be the implementation of a TPD program based on international best practices and the third involves the design and implementation of an EWS to prevent student dropout.

29. Quality learning labs to address individualized learning needs. This activity will include: (i) the implementation of standards for personalized tutoring strategies to map learning gaps, creating small groups of students with similar learning difficulties, regardless of their grade or age; (ii) the design of structured pedagogical digital and non-digital materials focusing on foundational learning in basic competencies; (iii) training for learning lab personnel; and (iv) provision of learning materials for students, such as workbooks and energized books to promote students' engagement.³⁵ The activities will be coordinated with Component 2 to boost the use of technology in the learning labs. In addition, this subcomponent is aligned with the hybrid education interventions implemented by SEDUC, in collaboration with FGV and Google for Education, to respond to students' specific learning needs and reduce gaps in their understanding. It also promotes learning continuity in the event of climate disasters or other shocks that could result in school closures.

30. Design and implementation of a TPD program to promote pedagogical classroom management and leadership and school management. The following pedagogical classroom management activities will be financed: (i) the design of a new professional development program for teachers—targeting 6th through 9th grade teachers—to improve their teaching techniques, in alignment with personalized tutoring standards; (ii) the design and implementation of peer-to-peer learning opportunities and a continuous coaching system to establish feedback mechanisms for teachers; (iii) the development of practical training materials on pedagogical skills; and (iv) capacity-building for regional directorates' staff to cascade teacher training related to the implementation of the *Alfabetiza MT* in state and municipal schools.³⁶ A classroom observation tool (TEACH) will be used to assess adherence to and usage of the content of the TPD program. Interventions on leadership and school management include: (a) the training of pedagogical coordinators and school leaders on the use of data (such as internal and external learning assessments), leadership techniques, planning, and setting of standards and benchmarks of management processes; and (b) the definition of quality index target (IDEB) and policy milestones of programs' implementation to increase accountability at the classroom and school levels. The activities will address the differences in teaching practices between male and female teachers in MT whenever needed. Teachers will also receive training on climate preparedness and response to manage any future climate-related event.

31. Development of an EWS to identify and support students at high risk of dropping out. The design of the EWS involves three main actions: (i) the design and implementation of a 'dropout risk' questionnaire (with yes/no questions) for students and a 'dropout triggering factors' questionnaire (for example, teenage pregnancy, sexual violence, bullying, exposure to extreme weather events, and other drivers) for school coordinators; (ii) the development of personalized interventions based on the mappings of the

³⁵ Energized books use QR codes to connect with the digital content of the hybrid learning strategy.

³⁶ Cooperation agreements will be signed with each Municipality that benefit from the activity defining the obligation regarding the Project.



dropout risk and triggering factors; and (iii) specific training on implementation of anti-dropout interventions for school personnel. This initiative is aligned with the federal program to prevent school dropouts and build capacity at the central and regional levels to support municipal networks for integrating information and actions.

32. The results of these activities will be captured through the following PBCs:

PBC 1: SEDUC shall have delivered Personalized Tutoring to at least 20% of State Schools with Adequate Learning Labs (US\$11.0 million). This will monitor the development and implementation of personalized tutoring classes in state schools to help recover learning losses and contribute to the return to in-person education by improving learning lab activities. The program will also support the development of transversal skills in students to promote awareness of climate risks and responsiveness to natural disasters. Achievement of the PBC will be verified by an external verification agent (EVA), as evidenced by one onsite visit to each of a representative sample of state schools and measured from a baseline of 0 percent.³⁷

PBC 2: SEDUC shall have implemented selected activities of the EWS in at least 50% of State Schools (US\$10.0 million). This will track the implementation of the EWS in state schools to predict students' risk of dropping out related to school closures and climate-change-induced events, as well as the implementation of personalized mitigation strategies. Achievement of the PBC will be verified by an EVA, through one onsite visit to each of a representative sample of state schools and measured from a baseline of 0 percent.

33. **Subcomponent 1.2: Strengthen school management and promote state-municipality cooperation and cost efficiency (US\$5 million).** This subcomponent aims to support the state in the reorganization of the regional governance structure and the decentralization of school management through the training of regional directorates personnel and the provision of technical assistance from the state to municipalities to promote a collaborative system between SEDUC and MT municipal governments. The key activities supported under the subcomponent include: (i) capacity building for SEDUC and regional directorates personnel on management and leadership for the decentralization of school coordination under the regional directorates; and (ii) capacity building and awareness raising for municipal stakeholders in the education and financing sectors to support the implementation of the reform of the main state sales tax (ICMS) at the municipal level; and (iii) carrying out supervision activities of interventions at state schools through the regional directorates. The latter is aligned with the reform of the ICMS RBF program to promote the cooperation of municipalities to implement the state and national learning recovery and acceleration strategy, as well as to promote the efficient allocation of funds through a rigorous incentive mechanism. The preparation of emergency plans aligned with the EWS will be included in the capacity building on school coordination, which will allow implementation of a coordinated response climate-related events.

Component 2: Transforming Digital Infrastructure (US\$20 million, disbursed against two PBCs)

34. **Component 2 will improve the digital conditions for teaching and learning through better digital infrastructure of state schools and SEDUC.** This component will improve school connectivity and the use of existing technology, such as recently acquired and deployed equipment and the existing learning platform, and will provide targeted training to enhance teachers' and students' digital skills. It will also

³⁷ Multiple EVAs can be contracted according to the technical capacity of each firm to verify the achievement of the each PBC.



expand the use of geospatial data to foster efficiency of management systems. This component will include two PBCs.

35. **Subcomponent 2.1: Improve schools' connectivity and digital skills (US\$16 million).** This subcomponent will establish the digital infrastructure needed to guarantee schools' connectivity, provide digital upgrades, and enhance teachers' and students' digital skills, in addition to enhancing the quality of remote learning, in the case of school disruptions due to climate events or other shocks. Activities under this subcomponent will include: (i) improvement of internet bandwidth through the deployment of fiber links to large schools; (ii) LAN, including Wi-Fi connectivity in schools; (iii) proactive management of network equipment through a network management system; and (iv) provision of training and materials to increase digital skills. Internet connections will be upgraded in 150 large schools (schools with more than 700 students) in the metropolitan, urban, and rural areas where it is possible to extend the existing fiber network, as well as the LAN in 186 large schools. The subcomponent will also monitor internet bandwidth quality through the deployment of *Medidor Educação Conectada* software in all targeted schools, as well as the deployment of physical networks to provide comprehensive internet access inside the schools (classrooms and administrative areas).

36. **To optimize the impact of this investment, the subcomponent will also support the development and integration of a new digital skills training program in the state curriculum.** These activities will be aligned with Component 1 to foster TPD opportunities using tech-based solutions and enhance classroom pedagogical practices. Furthermore, it will target schools with a higher risk of exposure to climate change-induced disasters (to support increased, more reliable remote connectivity) and promote the responsible disposal and recycling of obsolete technological equipment. Providing schools' internet connection contributes to the community's climate resilience, given that approximately 87 percent of MT schools have structures that can be used as shelters in emergencies.³⁸

37. The results of these activities will be captured through the following PBC:

PBC 3: SEDUC shall have provided Adequate Internet Connection to at least 506 State Schools (US\$16.0 million). This PBC will track the quality and availability of internet connectivity in the state schools. This will ensure that each school has adequate internet access for its student population, as per the existing MEC guidance on adequate internet, defined as a minimum of 100 Kbps per student multiplied by all students in each shift. The activity will also target vulnerable schools with higher risk of exposure to climate change induced natural disasters to develop digital skills and improve the internet connection to be used in case of climate-related emergencies. Achievement of the PBC will be verified by an EVA through one onsite visit to each of a representative sample of state schools and measured from a Baseline of 356 State Schools.

38. **Subcomponent 2.2: Upgrade the existing Education Management and Information System (EMIS) (US\$4 million).** The subcomponent will support the upgrade of the existing outdated and inefficient EMIS software to improve education system and school management, as well as promote efficient decision-making in municipal and state networks. The new EMIS will incorporate the functionalities of the existing EMIS and add new ones to improve management, such as geolocation of schools, students, and teachers. This EMIS will be integrated with the existing teacher training learning management system (LMS) and the future school equipment and maintenance systems to improve

³⁸ Based on the assessment of infrastructure conditions developed by SEDUC.



interoperability and consistency of data between the systems. Activities will include: (i) upgrading MT's current EMIS (SIGEDUCA); (ii) developing a student registration portal that will collect geospatial data as the front end of the new student registration module; (iii) developing a teacher management system to support efficient deployment and allocation of teachers; (iv) enhancing the existing LMS with new functionalities to support blended education; and (v) integrating the LMS with the training management module of the new EMIS. The EMIS will be maintained by the Superintendence of Information Technology (*Superintendência de Tecnologia da Informação, SUTI*) under the Executive Secretariat of Education (*Secretaria Adjunta Executiva, SAEX*), which has the technical capacity in place to manage the information system.

39. **The Project will also contribute to scaling up all the state's systems for municipal networks to promote data interoperability between systems and more efficient use of educational data.** These system components will be developed as a modular service-oriented architecture and will be deployed in SEDUC, municipal education departments, and municipal and state schools to ensure harmonized use of the management systems across the state. The EMIS will contribute to measuring the impact and risk rating of natural and climate-induced disasters in schools, which will be used to inform the school network of possible climate events and carry out evacuations or put in place emergency management plans. The LMS will support training delivery to teachers and other capacity-building activities to raise the school community's awareness of climate change disaster risk management and how to implement mitigation and adaptation measures.

40. The results of these activities will be captured through the following PBC:

PBC 4: SEDUC shall have deployed and is operating all the Upgraded EMIS Modules, at SEDUC and at State Schools (US\$4 million). It will monitor the development and implementation of the EMIS in state schools. This will contribute to strengthening SEDUC's capacity to manage the education system and promote efficient decision-making based on geospatial data in municipal and state networks, which will be tracked based on the percentage of schools using the functionalities of the new EMIS. The achievement of this PBC will also contribute to SEDUC decision-making processes related to schools' resilience to climate change shocks and natural disasters. Achievement of the PBC will be verified by an EVA, through one onsite visit to SEDUC and each of a representative sample of state schools and measured from a Baseline of 0.

Component 3: Creating Green, Resilient, Inclusive and Safer State Schools (US\$53 million, of which US\$15 million will be disbursed against the achievement of two PBCs)

41. **Component 3 will support the rehabilitation of school infrastructure and complementary strategies to promote safer, more inclusive, greener, and more climate-resilient learning environments.** This component will help SEDUC design and improve school environments to support learning recovery and acceleration and increase resilience to future crises and climate change impacts.³⁹ Investments in infrastructure will support the construction of energy-efficient solutions, ensure access to water supply and waste management systems, and improve WASH infrastructure. In addition, the component will ensure infrastructure improvements for schools in indigenous peoples and *Quilombolas* communities, as well as improvements in architectural conditions to build safer schools for girls (appropriate physical

³⁹ See Patrinos (2019) for the learning challenge in the 21st century:

<https://documents1.worldbank.org/curated/en/237951586807728651/pdf/The-Learning-Challenge-in-the-21st-Century.pdf>.



facilities, including school buildings, grounds, separate sanitation facilities, furniture, lighting, and security equipment). Furthermore, the component will establish complementary strategies to create an adequate environment for students with disabilities and to better include and protect vulnerable students through the violence prevention plan (VPP). This component will include two PBCs in the amount of US\$15 million.

42. **Subcomponent 3.1: Rehabilitate and maintain safe, inclusive, green, and resilient infrastructure (US\$46 million).** This subcomponent will improve school infrastructure to promote safe, inclusive, green, and climate-resilient learning environments;⁴⁰ adapt physical school environments for students and teachers with disabilities; and rehabilitate indigenous peoples and *Quilombolas* schools based on community consultations. Activities to improve school infrastructure will include the development and implementation of a School Infrastructure Maintenance Management System (MMS)⁴¹ to strengthen the state's school infrastructure operation and maintenance. The system will enable policy makers to make risk-informed investments in infrastructure by: (i) providing information on disaster risk and climate-vulnerable areas; (ii) architectural and engineering designs and civil works for the rehabilitation of existing schools in line with green, resilient, and inclusive principles; (iii) procurement of equipment such as power stations, renewable energy and 'energy star' rated air conditioning equipment to improve energy efficiency in selected school facilities; (iv) civil works to improve WASH facilities, including connection to public water supply and wastewater pipelines to avoid waterborne and infectious diseases, such as dengue fever and measles; (v) civil works to improve girls' safety in schools (appropriate physical facilities, including school buildings, grounds, separate sanitation facilities, furniture, lighting and security equipment); and (vi) adaptation of architectural designs and rehabilitation of schools to promote inclusive environments for indigenous peoples, *Quilombolas*, and students with disabilities.

43. **In combination with the technical assistance under Subcomponent 4.2, this subcomponent will support the development of a school infrastructure investment plan based on a school mapping exercise.** This plan will organize the infrastructure interventions of SEDUC, for example, within a system of broad versus targeted activities, pre-investment and investment phases, and investment versus management. These activities will target 75 state schools in MT's most vulnerable and fragile areas, including 15 schools in indigenous and *Quilombolas* communities, which will be selected based on needs assessments and in consultation with beneficiary communities.⁴²

44. **Furthermore, to improve the adaptive capacity of the school system against climate change impacts, the subcomponent will support the development of a framework to scale up low-carbon and climate-resilient infrastructure interventions in the medium to long term through school infrastructure plans.** Carbon emissions will be reduced by improving schools' waste management systems and decreasing energy consumption by acquiring energy-efficient equipment. Energy efficiency and WASH considerations will be informed by a technical assessment that will identify sustainable and scalable energy efficiency solutions, following international best practices adequate to the local context, to

⁴⁰ Including their ability to address natural disasters such as floods, droughts, and fires.

⁴¹ The school MMS is a systematic method for inspecting and rating school conditions in a given area as well as prioritizing and recommending rehabilitation and maintenance to maximize results within a given budget amount.

⁴² Through a diagnosis-analysis-planning process and in consultation with stakeholders, vulnerable and fragile schools will be identified and the need for interventions in the selected school facilities will seek cost-efficient engineering solutions applicable to the local context.



improve the quality of learning environments for children and increase the resilience of the school system to climate shocks.

45. The results of these activities will be captured through the following PBC:

PBC 5: SEDUC shall have developed and deployed the MMS in at least 50% of State Schools (US\$8 million). This PBC will monitor the development and implementation of the MMS in state schools, which will contribute to rehabilitating and maintaining the current school network to be more safe, inclusive, green, and climate resilient. The MMS will include information on disaster risk and climate vulnerability to allow SEDUC to target the schools most vulnerable to climate change-induced natural disasters by supporting the provision and maintenance of WASH facilities and energy efficiency solutions. The Project will also monitor the flow of funds and training of the school administrators to ensure the sustainability of the system. Achievement of the PBC will be verified by an EVA through one onsite visit to each of a representative sample of state schools and measured from a Baseline of 0 percent.

46. **Subcomponent 3.2: Promote violence prevention and inclusive education in schools (US\$7 million).** This subcomponent will support activities to prevent violence and promote inclusion, in coordination with the EWS activities under Subcomponent 1.1, considering the correlation between high levels of school violence and dropout risk, and will mitigate the dropout rate in vulnerable contexts in the short, medium, and long term. The EWS helps identify students with high dropout risk and proposes tailored interventions for the short and medium term. The VPP supports the school in building activities to create a safer environment and to reduce the dropout rate of vulnerable students. Preventive interventions will be carried out with a gender lens, focusing on the prevention of school-related gender-based violence (SRGBV), psychological violence, bullying, and cyberbullying. Key activities will include: (i) focus groups and in-depth interviews to identify the leading causes of violence in schools and collect suggestions for implementation of the VPP; (ii) development of activity toolkits to prevent school violence, which can include activities of socioemotional skills development, group activities based on cognitive behavioral theory, a system of violence notification, and activities with the student association. The program will have an intercultural and differential approach to respond to the needs of indigenous schools and to the specific needs of girls and boys, respectively, and is expected to reduce dropout among vulnerable girls and boys, thus reducing the negative economic impacts related to lost lifetime earnings.⁴³

47. **The subcomponent also seeks to help overcome the barriers to educating all children and promote equality and nondiscrimination.** Aligned with Subcomponent 1.1 activities, it will do so by: (i) providing teacher training and acquiring teaching and learning materials (TLMs) to support disability-inclusive teaching; (ii) carrying out consultations with indigenous and *Quilombolas* communities to integrate cultural components and traditions specific to each community in the rehabilitation of schools; (iii) adapting and providing TLMs for indigenous peoples and *Quilombolas* schools based on the consultations; and (iv) design an anti-racism awareness training. Universal design will also be applied to selected infrastructure to eliminate architectural and physical barriers for persons with disabilities, including students and teachers.

48. The results of these activities will be captured through the following PBC:

⁴³ See 'Ending Violence in Schools: An Investment Case' for the analysis for the cost-benefit analysis (CBA) of violence-prevention interventions: <https://openknowledge.worldbank.org/handle/10986/35969>.



PBC 6: SEDUC shall have developed the VPP and carried out Selected Activities of the VPP in at least 70% of State Schools (US\$7 million). Activities to address barriers to education access and promote equality and nondiscrimination will be monitored through the preparation of plans to prevent and combat violence, including psychological violence, bullying, cyberbullying, and GBV. Achievement of the PBC will be verified by an EVA, through one onsite visit to each of a representative sample of state Schools and measured from a Baseline of 0 percent.

Component 4: Project Management, Training, Monitoring, and Evaluation (US\$6.00 million)

49. **Component 4 will support project coordination, capacity building of SEDUC, and the implementation of monitoring and evaluation (M&E) activities.** A Project Management Unit (PMU) will be established under this component to carry out project coordination, including project management, procurement, financial management (FM), M&E, and environmental and social management. Capacity building will be provided to SEDUC and the municipal network teams to enable them to design and coordinate the Project's main activities.

50. **Subcomponent 4.1. Project coordination (US\$2 million).** The subcomponent's main objective of this is to support SEDUC in the effective coordination of the Project and it will finance: (i) the PMU's works (such as container office), operational costs, basic equipment, goods, and materials; (ii) engaging and/or hiring staff and consultants to be placed with the PMU; (iii) technical assistance for the implementation of a governance and risk assessment system (software and protocols); (iv) capacity building for internal controls and verification of PBCs; (v) staff to support environmental and social management; (v) communication strategies for the dissemination of the Project's activities, and (vi) studies for participating agencies with emerging needs.

51. **Subcomponent 4.2. Training, monitoring, and evaluation (US\$4 million).** This subcomponent will provide technical assistance to strengthen SEDUC's institutional capacity to implement the Project and carry out its main activities, such as the design of green and inclusive schools, the development of the EWS, studies to measure the project effectiveness, capacity building activities, and scholarship to support the implementation of the interventions at the school level. The studies are on topics related to the Project, which may address impact evaluations of main programs, including, but not limited to: (i) personalized tutoring program; (ii) EWS program; (iii) peer-to-peer learning opportunities and coaching programs; (iv) socioemotional skills development program; and (v) training in digital skills program. The capacity building activities aims to provide training to SEDUC team on the development of architectural projects for sustainable, climate-resilient, and inclusive schools, on planning and project management and on process and risk management. The project will provide the following scholarships: (i) mentoring scholarships for eligible education professionals who carry out pedagogical and administrative activities and coordinate strategic projects; and (ii) training scholarships for eligible education professionals who develop training content and who act as training instructors for education professionals.

52. **Counterpart funds in the amount of US\$25 million will be accounted and reported as the amounts executed under any project components but not claimed for reimbursement under the Project.** Table 1 summarizes the Project's budget allocation by component and counterpart funds.



53. **The Project is designed to address challenges related to gender, climate change, inclusive education and citizen engagement.** Considering that the underlying reasons for learning losses and school dropout vary according to gender, economic and social status, and exposure to natural disasters, among others, the Project will seek to strengthen the school environment and local capacity to deal with these various factors.

54. **Gender.** The VPP and learning recovery strategies will help develop tailored activities to support schools in approaching households, families, and students that dropped out due to GBV, teenage pregnancy, SRGBV, and other gender-related drivers to reduce the gap in dropout rates between girls and boy. To monitor the gender gap in dropout rates, while seeking to enhance all vulnerable students' retention in MT state network secondary school, the PDO indicator 'Dropout rate in grade 10 in schools of the state network' has been included to help track the progress of these activities on reducing overall dropout rates, also related to Components 1 and 3. The indicator will be disaggregated by gender and will assess if the gap in dropout rates between boys and girls is reduced and monitor if the girls' dropout rate has been more significantly affected by the pandemic. Furthermore, a PBC has been included to incentivize the implementation of the VPP in schools that will tackle GBV and SRGBV.

55. **Climate Change.** The Project will also help address the potential impacts of natural disasters and climate change on learning by building safe and green schools, which will help adapt to and mitigate the climate change induced events and natural disasters risks to the school system. The dropout risk questionnaire in the EWS will map the influence of 'floods, droughts, tropical storms, and landslides' on the risk of dropping out of school (all of which can be a direct consequence of worsening impacts of climate change).

56. **Citizen engagement.** The Project incorporates a citizen-oriented design and includes a beneficiary feedback indicator in the Results Framework: 'Number of feedback surveys conducted to assess the beneficiary satisfaction', including teachers, students, and parents. The results of the survey will be used to revise the design of activities to address the beneficiaries feedback if needed. The TPD program under Subcomponent 1.1 will be designed considering the previous and continuous dialogue between SEDUC, teachers and unions on the capacity building needed to foster improved pedagogical techniques and digital competencies that boost learning recovery. A feedback survey will be included to capture teachers' level of satisfaction and their perception of the training's utility in improving their performance. The survey will include a space for comments and suggestions to inform the design of future training programs. Comments received that require a response will be answered within 30 days. In collaboration with the World Bank, the Borrower has also prepared an inclusive and participatory Stakeholder Engagement Plan (SEP) and an Indigenous Peoples Plan (IPP), proportional to the nature and scale of the Project and associated risks and impacts, to be implemented throughout the Project cycle. Similarly, *Quilombola* communities that will be supported by the Project must confirm their adherence to the activities and will be continuously engaged through *Quilombola* associations.

C. Project Beneficiaries

57. **The proposed Project is expected to benefit school principals, school administration staff, teachers, and students of the municipal and state school networks in MT.** Considering that the Project will focus on activities for primary through secondary education, each component will focus on different levels of education and target vulnerable schools to achieve the development objectives and maximize



the Project's impacts. Component 1 will focus on pedagogical interventions to support the Government's efforts to revert learning losses and accelerate learning progress in state schools and will benefit 549 school principals, 5,394 teachers, and 18,357 students. Components 2 and 3 will focus on transforming the digital technology and the improvement of learning environments of 200 state primary and secondary schools and will benefit 349 school principals, 5,386 teachers, and 169,135 students.

D. Results Chain

58. **Table 2 presents the Results Chain for this Project, which presents its components, planned activities, outputs, outcomes, and their relation to PDO indicators and the PDO.** The proposed PBCs are highlighted in bold.



Table 2. Results Chain

Key Challenges	Inputs/Activities	PBCs and IRIs	Outcome	PDO
<i>Component 1: Strengthen Pedagogical Interventions and School Management Strategies for Learning Recover</i>				Improved teaching practices, teachers’ digital readiness, and schools’ learning environments in MT
• Low learning levels, with many students at level zero on the SAEB proficiency scale, and aggravated by COVID-19 impact • High percentage of teachers with inefficient pedagogical practices • Inefficient spending on primary education in municipalities • High repetition and dropout rates, aggravated by COVID-19 school closures. • Centralization of school coordination under SEDUC	• Personalized tutoring strategies, remedial education, and solutions for hybrid education by improving learning lab activities • Develop an EWS, considering gender, school violence, and teenage pregnancy • Develop a TPD program • Capacity building for SEDUC and regional directorates personnel • Technical assistance on early grades literacy program for municipalities.	PBC 1: SEDUC shall have delivered Personalized Tutoring to at least 20% of State Schools with Adequate Learning Labs • Percentage of MT municipalities implementing classroom observation tools and coaching for teachers' professional development. PBC 2: SEDUC shall have implemented Selected Activities of the EWS in at least 50% of State Schools • Percentage of teachers that completed a training session on the Alfabetiza MT program • Percentage of staff trained on management practices to strengthen the coordination with municipalities	Improved teaching practices in Portuguese and mathematics in 6th grade Reduced dropout rates for boys and girls in 10th grade	
<i>Component 2: Transforming Digital Infrastructure</i>				
• Outdated and inefficient digital management system • Insufficient connection speed in schools impedes effective use of technology • Low digital competencies in teachers impede learning recovery and acceleration • Low level of technology use in schools • Lack of an IT maintenance plan	• Upgrade EMIS using geospatial data to improve enrollment, teachers’ recruitment and allocation, and school bus routes • Improve school-level digital infrastructure (Wi-Fi and internet) • Improve use of devices (laptops, Chromebook, etc.) in teachers and students • Improve digital skills of secondary education teachers	PBC 3: SEDUC shall have provided Adequate Internet Connection to at least 506 State Schools PBC 4: SEDUC shall have deployed and is operating all the Upgraded EMIS Modules, at SEDUC and at State Schools • Percentage of education staff of the state network trained in the use of the new Education Management and Information System (EMIS) • Percentage of schools with adequate information technology infrastructure • Percentage of Indigenous Population and	Improved digital skills in teachers	



Key Challenges	Inputs/Activities	PBCs and IRIs	Outcome	PDO
	Promote cost-efficient technological solutions, adequate connection, and the green disposal of devices	Quilombola schools with connectivity - Number of state schools implementing ecological disposal mechanisms - Percentage of teachers that completed the training on digital skills program - Number of schools managed by the Connected Education Meter		
<i>Component 3: Creating Green, Resilient, Inclusive and Safer State Schools</i>				
- Deforestation, wildfires, floods, extreme heat, and intense droughts that requires adaptation of school infrastructure - Insufficient energy access and inadequate WASH facilities in schools - High level of SRGBV - Inadequate school design for students with disabilities - Inadequate indigenous peoples and <i>Quilombolas</i> schools	- Energy-efficient solutions, access to water supply and waste management systems, and improvement of sanitary and hygienic infrastructure - Works to reduce the vulnerability of school facilities to flood and wildfire hazards - Safety adaptations and violence prevention of SRGBV - Adaptation of architectural conditions in schools and teaching training for children with disabilities - Rehabilitation of indigenous and <i>Quilombolas</i> schools	PBC 5: SEDUC shall have developed and deployed the MMS in at least 50% of State Schools - Number of schools rehabilitated - Percentage of school principals and coordinators trained in the use of the (School Maintenance Management System) MMS - Percentage of indigenous populations and <i>Quilombolas</i> schools rehabilitated based on community consultation PBC 6: Percentage of secondary schools in the state network implementing the violence prevention plan - Percentage of teachers, principals, coordinators and secretaries who received school violence prevention training - Number of teachers, principals, coordinators and secretaries trained in pedagogical strategies to support students with disabilities - Percentage of teachers of indigenous populations and <i>Quilombolas</i> schools who received training on pedagogical materials culturally adapted to support learning recovery	Secondary students have access to sustainable, safe, inclusive, and resilient learning environments	



E. Rationale for Bank Involvement and Role of Partners

59. **Public sector financing for education is justified for three main reasons.** First, education generates positive externalities; therefore, its private provision does not ensure the level of production that maximizes society's well-being.⁴⁴ Second, education can be an instrument of social justice and equity promotion. Inclusive education enables individuals to achieve future outcomes based on their own excellency, not their historical contexts. Since one of the essential functions of the state is redistribution, education can be a part of the state's scope of action. Third, parents may not perceive the benefits of education in the long run, reducing the private education investment in their children. Then, the quantity of education consumed by the population might be lower than the ideal level if not provided by the state.

F. Lessons Learned and Reflected in the Project Design

60. **The Project is informed by previous federal and subnational operations in Brazil and incorporates lessons learned on the need to ensure states' capacity to implement federal level education plans, strengthen M&E and implementation capacity, and supporting education reforms.** The Project will ensure engagement with the federal government on key national programs to ensure states are well-informed and supported to implement them, in terms of content and operational processes. This strategy has been key in producing results under the Upper Secondary Reform in Brazil Program for Results, which has required dialogue between federal and state education authorities in the implementation of the upper secondary education reform and the national learning recovery strategy. Proposed Project activities also consider the Bank's experience with subnational operations in Brazil's education sector – including the Piauí: Pillars of Growth and Social Inclusion Project (P129342) and the Salvador Social Multi-Sector Service Delivery Project (P162033) – which faced bottlenecks due to the low capacity in state governments to use data and M&E to inform interventions and decision-making. As such, this Project would build capacity at the state level to use data and M&E as a tool in the development and implementation of education programs. The Project also builds on these experiences by promoting citizen engagement and consultations with minority groups to ensure that such broad, overarching sector reforms reflect local needs and have sufficient buy-in from affected populations.

III. IMPLEMENTATION ARRANGEMENTS

A. Institutional and Implementation Arrangements

60. **Implementing agency.** SEDUC will be responsible for coordinating, monitoring, and reporting on overall Project activities and outcomes. A PMU will be established within SEDUC to execute this Project, specifically within SEDUC's Cabinet office (*Núcleo Estratégico de Captação de Recursos e Avaliação de Projetos*, NGER). Other sub-secretariats will implement and monitor specific components and subcomponents, reporting back to NGER/SEDUC. The Sub-secretariat for Educational Management (*Secretaria Adjunta de Gestão Educacional*, SAGE) will oversee all pedagogical development related activities. The Sub-secretariat of Regional Management (*Secretaria Adjunta de Gestão Regional*, SAGR) will be responsible for regional management and for monitoring the implementation of activities at the level of regional directorates. The Sub-secretariat for Systemic Administration (*Secretaria Adjunta de*

⁴⁴ Locatelli, R. 2018. "Education as a Public and Common Good: Reframing the Governance of Education in a Changing Context."



Administração Sistêmica, SAAS) will carry out the Project's FM and procurement. The Sub-secretariat of Infrastructure and Property (*Secretaria Adjunta De Infraestrutura E Patrimônio, SAIP*) will coordinate and execute all construction works and IT activities and the Sub-secretariat for People Management (*Secretaria Adjunta de Gestão de Pessoas, SAGP*) will coordinate and implement all capacity-building activities.

61. **The PMU will put together a core team that will include a project coordinator, a deputy coordinator, a senior FM specialist, a senior procurement specialist, an M&E specialist, a senior environmental specialist, a senior social specialist, and a communications specialist.** The PMU will assign a focal point within its structure to each of the sub-secretariats and other participating agencies to enable close coordination and monitoring of results and activities. External consultants will be hired, as required, to guarantee essential support to the PMU. Additional operational protocols will be included in the Project Operations Manual (POM).

62. **SEDUC's downstream monitoring of the Project's implementation will be supported by the 15 recently created Regional Directorates of Education (*Diretorias Regionais de Educação, DREs*).**⁴⁵ The DREs are organizational structures, subordinate to SEDUC, whose mission is to manage the implementation, monitoring, and evaluation of the basic education policy in school units' jurisdictions, ensuring students' access to and retention in schools, as well quality learning. Subordinate to SAGR, the Superintendence for School Relations (*Superintendência de Relacionamento Escolar, SURE*) will be responsible for advising and monitoring school networks, including school mediation and the school census. The Superintendence for Regional Directorates (*Superintendência das Diretorias Regionais, SUDR*) will be responsible for supervising the implementation of all DREs. The DREs will implement activities through six coordination offices (*coordenadorias*).

B. Results Monitoring and Evaluation Arrangements

63. **The proposed Project will contribute to upgrading the SEDUC EMIS systems to establish the M&E of project indicators.** The new EMIS will enhance the monitoring capacity of each sub-secretariat to oversee the implementation of the sector programs and prepare systematized reports on their specific activities. The Results Framework and Monitoring section includes the list of entities responsible for collection, analysis, and reporting of the Project's M&E data. The PMU will also create a dashboard to monitor and promote transparency on key project indicators as part of the alignment of the Project with SEDUC's M&E policy. Moreover, the PMU will be responsible for monitoring multisector integrated initiatives, and each DRE will monitor its own indicators and send data to SEDUC for consolidation. The PMU will be responsible for reporting progress on Project indicators to the Bank not later than one month after the end of each calendar semester.

C. Sustainability

64. **The Project's close alignment with the education sector plan, and its focus on strengthening capacity to scale up Project-financed activities in the long term, will set foundations for its sustainability.** The MT government has expressed its commitment to preparing the PEE 2024–2028 with consideration given to the design and lessons learned from the Project, helping ensure their continuity.

⁴⁵ DREs were created by Law No. 11.668, of January 11, 2022, and are regulated by Decree No. 1.293 of February 15, 2022.



The PMU will be established within the NGER to build on the capacity to manage the Project and advise all the sub-secretariats involved. The Project will also contribute to building the SEDUC's capacity to monitor the implementation of Project activities at the school level in collaboration with the regional directorates. The Project's impact is expected to be sustained beyond the financing provided by the World Bank, based on the establishment of a PMU within SEDUC that will build the capacity of SEDUC staff to continue and scale up activities in the long term. Moreover, the staffing of the PMU will include administrative, fiduciary, and environmental and social specialists and the contracting of additional personnel as regular positions in SEDUC, reducing the risk of personnel rotation. The proposed Project will also strengthen existing capacity to articulate educational policies and activities across sub-secretariats, aiming to establish operational processes that can be maintained and replicated beyond its life.

IV. PROJECT APPRAISAL SUMMARY

A. Technical, Economic and Financial Analysis

65. **Expected development impact.** The Project is expected to generate higher productivity in the long term by improving the quality of education in MT. Its components are expected to improve the quality of education through several different channels. In the long term, Components 1, 2, and 3 are expected to enhance the quality of education by increasing the quality of teaching and learning, by improving the use of reliable and real-time data, and by improving the school environment. In that sense, the economic benefits measured are in terms of incremental individual wages (which capture productivity) generated by increasing the quality of education. The economic returns of education are extensively evidenced. Estimates using PNAD (2019)⁴⁶ show that the average return of education in MT is 6.3 percent.

66. **A Cost-Benefit Analysis (CBA) was carried out to assess the expected development impacts cited above.** The Project's net present value (NPV) is estimated to be US\$152.7 million with an internal rate of return (IRR) of 26 percent, using a discount rate of 10 percent and a 30-year time horizon. If the discount rate is 15–8 percent, then the NPV is US\$63.2–US\$215.9 million. In addition, risk analysis considers that the Project may not reach all the expected beneficiaries. If the Project reaches 50–100 percent of the expected number of beneficiaries (based on the PDO indicators), the NPV is US\$90.1–US\$246.5 million, and the IRR is 20–33 percent. The estimates can be considered conservative since they do not encompass all Project activities.

67. **Paris Alignment.** The operation is aligned with the goals of the Paris Agreement on both Adaption and Mitigation.

68. **Assessment and reduction of adaptation risks.** The main climate and disaster risks likely to affect the Project are extreme heat, drought, and flooding (river and urban), in addition to landslides and

⁴⁶<https://www.ibge.gov.br/estatisticas/sociais/trabalho/9171-pesquisa-nacional-por-amostra-de-domicilios-continua-mensal.html?=&t=downloads>.



wildfires.⁴⁷ The Project's design takes into consideration the expected and potential climate impacts that may affect its intended outcomes and includes various adaptation measures. In particular, the Project will finance the following specific activities to minimize climate-related risks, enhance climate resilience and limit the exposure to a low level of residual risk:

- Component 1 will support pedagogical and school management interventions to address students' learning recovery and acceleration and promotes learning continuity in the event of climate disasters or other shocks that could result in school closures, such as extreme heat and flooding. Among its activities to adapt and mitigate the impacts, the Project includes the development of "take home" materials for continued learning in the event of school closures, and training on awareness of risks, climate preparedness, and responsiveness to natural disasters under the TPD. Additionally, the Component comprises the inclusion of climate-related considerations in the Early Warning System to predict students' risk of dropping out and the collection of data on how school closures, due to climate-related events, affect student attendance to inform the development and implementation of personalized mitigation strategies, along with the development of emergency plans and early disaster-warning systems in coordination with state and municipalities.
- Component 2 aims to improve the digital conditions for teaching and learning through a better digital infrastructure of state schools and SEDUC. The activities within the scope of this component target schools with higher risk of climate change-induced natural disasters risk and aims to improve teachers' and students' digital skills to participate in eventual remote learning. Moreover, schools will be provided with internet connection, enhancing their infrastructure to ensure their use as shelters in case of climate-related emergencies. The Component will also include an upgrade of the EMIS with geospatial data to contribute to the decision-making processes related to schools' resilience, by enabling the monitoring and response to natural disaster and climate change-induced events in state schools.
- Component 3 will support the design and improvement of school environments for learning recovery and acceleration and aims to increase resilience to future crises and climate change impacts. As part of adaptation measures, the Component involves the inclusion of information on disaster risk and climate vulnerability in the MMS. Furthermore, the activities under this Component will prioritize schools with a higher risk of exposure to climate change-induced natural disasters.

69. **Assessment and reduction of mitigation risks.** The Project has a low risk of preventing Brazil's transition to low-carbon development pathways, given its support to activities that have a negligible impact on GHG emissions, and universally aligned activities such as those included under Components 1 and 2. Low-mitigation risks are associated with minor civil works for rehabilitation of school infrastructure and complementary strategies financed under component 3, intended to promote safer, more inclusive, greener, and more climate-resilient learning environments. However, these risks will be reduced by including energy and environmental efficiency requirements, including following green building codes to reduce energy consumption for project facilities that are already connected to a grid that is mostly

⁴⁷ Think Hazard Assessment for the State of Mato Grosso: (a) River/urban flood and wildfire hazards are classified as high (potentially damaging and life-threatening floods are expected to occur at least once in the next 10 years; there is greater than a 50 percent chance of encountering weather that could support a significant wildfire that is likely to result in both life and property loss in any given year); and (b) earthquake, landslide and extreme heat hazards are classified as medium.



supplied by renewable sources – Mato Grosso meets 94 percent of its electricity demand from renewable sources. Additional measures will include: (i) rehabilitation to reduce the thermal transmittance of school roofs and walls, thus reducing the need for artificial ventilation; (ii) improvement of schools' waste management systems, and (iii) purchase of energy-efficient equipment to replace older ones. The incorporation of technically feasible and economically viable low GHG emission measures to improve energy performance in the design of the expected civil works, reduce the risks associated with the low-carbon transition and those of carbon lock-in. Therefore, the operation can be considered aligned on mitigation.

B. Fiduciary

(i) Financial Management

70. **The Brazilian legal framework for public financial management (PFM) is well developed at all levels of government**, which is underpinned by the Federal Constitution and two main legal frameworks applied to the federal government, states, and municipalities: The Public Finance Law of 1964, No. 4.320 that regulates financial controls, budgeting, and reporting, and the Fiscal Responsibility Law of 2000, Supplementary Law No. 101 that dictates macroeconomic and fiscal discipline. Other reforms are being introduced (including a proposed revision to the Public Finance Law) to help strengthen accountability and transparency in the management of public finances in Brazil, including establishment of standards for the selection and evaluation of investment projects, introduction of a medium-term fiscal framework, measures to minimize the impact of expenditure commitments and carry-over amounts (*Restos a Pagar*), adoption of the International Public Sector Accounting Standards, and strengthening of rules and regulations of the internal and external oversight control institutions.

71. **The existing State Public Financial Management System and Framework has satisfactory internal rules and controls, with a clear definition of responsibilities and institutional arrangements.** MT has satisfactory accounting arrangements, controlled through the state's Financial Management Information System (*Sistema Integrado de Planejamento, Contabilidade e Finanças*, FIPLAN). The state is subject to the oversight of: (i) the State Court of Accounts (*Tribunal de Contas do Estado de Mato Grosso*, TCE/MT), which reports to the legislative branch and is responsible for performing the financial, compliance, and operational audits, as well as special reviews of the state and all municipalities' budget executions and the quality of government expenditures; and (ii) the State Internal Control Agency (*Controladoria Geral do Estado de Mato Grosso*, CGE/MT), which is responsible for internal auditing.

72. **The World Bank undertook an FM and procurement assessment (September, 2022) to confirm that the proposed fiduciary arrangements meet the World Bank's requirements under OP/BP 10.00 and the Financial Management Manual for World Bank-Financed Investment Operations and Other Operations Matters, issued and effective on September 7, 2021.** The objective of the Financial Management Assessment (FMA) was to determine whether the entity (or entities) implementing the project have acceptable planning and budgeting, accounting, internal controls, funds flow, financial reporting, and auditing arrangements. The entity's (or entities') arrangements are acceptable if they are considered capable of correctly recording all budgets, transactions, and balances; supporting the preparation of regular and reliable financial statements; safeguarding their assets; and are subject to auditing arrangements acceptable to the World Bank.



73. **The overall conclusion of the FMA is that:** (i) the FM arrangements for the proposed Project are considered acceptable;⁴⁸ (ii) the funds flow, disbursements, monitoring, auditing, and supervision arrangements have been designed in a way to respond to the Project's implementation arrangements; and (iii) the overall FM residual risk rating after mitigation measures applied is Substantial. There are no FM-related conditions for negotiations, Board, and/or effectiveness.

74. **The FMA identified the following risk to the achievement of the Project Development Objective:** i) the nature of the Project design involving municipal education departments, sub-secretariats, and other participating agencies; ii) SEDUC's lack of FM personnel to manage the Project; iii) no prior experience with Bank's policies and procedures with potential delays in contract bidding processes and disbursements at the start of implementation; (iv) low budget execution (FY20 - 31.4%, FY21 - 30.7% and CY22 39.3%), that may impact the amount of eligible expenditures to support the PBCs activities for disbursements purposes; (v) State Administrative System needs to be updated to run the Projects' Financial Statements (IFRs) properly; (vi) Annual Audit report to be prepared by a Private Audit Firm and not by the State supreme audit institution (TCE-MT) which may compromise the quality and completeness of audit report.

75. **Mitigation measures include:** i) continued close Bank's support and supervision; ii) two fully dedicated Financial Management staff should be appointed to undertake all FM-related tasks and to ensure segregation of functions, as to be detailed in the POM; PIU staff should participate in all fiduciary training offered throughout Project's life; (iii) the LOA should be updated to reflect the Project activities in specific budget lines and the Bank's close monitoring of budget execution; (iv) the CGE/MT will provide support to the PIU to ensure proper internal controls and segregation of function, and CGE will adopt the internal audit functions and risk-based approach; (v) the Bank to validate the State's Financial Management Information System (FMIS) to run the IFRs; and (vi) specific audit Terms of Reference (ToR) will be prepared by SEDUC and will be approved by the Bank.

(ii) Procurement

76. **Procurement under the Project will be carried out in compliance with the "World Bank's Procurement Regulations for IPF Borrowers," dated July 1, 2016, and revised in November 2020.** The procurement of all activities will be carried out by SAGR, through SAAS. Training on the World Bank's Procurement Regulations will be provided before implementation begins, as this Project covers the procurement of goods, works, consulting services, and non-consulting service contracts. Procurement arrangements shall follow all particularities and context described in the Project Procurement Strategy for Development (PPSD document). Due consideration will be given to sustainable procurement and gender aspects in procurement.

⁴⁸ Arrangements are acceptable if they are considered capable of recording correctly all budgets, transactions, and balances, supporting the preparation of regular and reliable financial statements, safeguarding the entity's assets, and are subject to auditing arrangements acceptable to the Bank.



C. Legal Operational Policies

Legal Operational Policies	Triggered?
Projects on International Waterways OP 7.50	No
Projects in Disputed Area OP 7.60	No



D. Environmental and Social

77. **Environmental.** Overall, the proposed activities do not present environmental complexity and are not expected to endanger living natural resources; or to pose a risk of environmental pollution and degradation of natural resources (air, soil, water); or to affect biodiversity or habitats, either positively or negatively, directly or indirectly; or depend upon biodiversity for its success. The proposed construction works will not have large-scale, significant, or irreversible adverse direct impacts and/or downstream implications on the environment. Their impacts are expected to be localized and preventable through responsive mitigation measures. On the contrary, the Project is expected to have a positive impact on natural resource efficiency management and pollution prevention. It will do so through the development and implementation of natural resources consumption efficiency practices, including reduction of paper consumption; water and waste management in public schools; identification of opportunities to shift the source of electricity and improve energy efficiency; and reductions in consumables, school travel time, and energy consumption through the digitalization of public administration services.

78. **Social.** The anticipated activities of the Project will not involve significant or irreversible social risks. The proposed Project is expected to generate positive social impacts by improving teaching practices, teachers' digital readiness, and learning environments for learning recovery. Education investments are associated with strong positive externalities, including economic, social, and wider benefits, which should be sustained over the long term. The Project is not expected to bring adverse impacts to indigenous peoples or require land acquisition or restrictions in land use. On the contrary, indigenous peoples and other disadvantaged and vulnerable social groups will benefit from the construction and rehabilitation of community schools and the provision of equipment and access to the internet for schools and students. The Project is also designed to address challenges related to gender, GBV, and sexual exploitation and abuse/sexual harassment (SEA/SH), which are associated with higher dropout rates for girls. High volumes of labor influx are not expected in these works and, consequently, the social risks ordinarily associated with labor influx are not expected to be significant. However, some schools may be located in rural communities that may make it difficult to supervise the works.

79. **The following Environmental and Social Standards (ESS) were found relevant during project preparation:** ESS1 - Assessment and Management of Environmental and Social Risks and Impacts; ESS2 - Labor and Working Conditions; ESS3 - Resource and Efficiency and Pollution Prevention and Management; ESS4 - Community Health and Safety; ESS6 - Biodiversity Conservation and Sustainable Management of Living Natural Resources; ESS7 - Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities; ESS8 - Cultural Heritage; and ESS10 - Stakeholder Engagement and Information Disclosure. The client prepared an Environmental and Social Management Framework (ESMF), which assesses the potential environmental and social impacts of the Project, evaluates the institutional capacity of the client, and sets specific measures and procedures to prevent and reduce adverse risks and impacts, budgetary provisions, and institutional responsibilities.

80. **SEDUC prepared an SEP and an IPP.** The ESMF, SEP, IPP, and Labor Management Procedures were publicly disclosed in a dedicated project website for SEDUC/MT, as well as in hard copies where appropriate, on November 1, 2022 with a link to a survey for feedback open until November 15, 2022.⁴⁹ The ESMF, SEP, and IPP incorporating the feedback from this consultation process will be finalized within

⁴⁹ <http://www3.seduc.mt.gov.br/padis/consultapadis>



30 days of Effectiveness.

81. **An Environmental and Social Commitment Plan (ESCP) was agreed**, incorporating the core elements of all the relevant ESS. The ESCP sets out the environmental and social instruments that shall be adopted and implemented under the Project. It will be revised periodically as necessary during project implementation to adapt to project changes, unforeseen circumstances, and/or or in response to Project performance.

82. Under ESS2, where there is a significant risk of forced labor related to primary supply workers, the Borrower requires the primary supplier to identify those risks and if forced labor cases are identified, the Borrower will require the primary supplier to take appropriate steps to remedy them. Ultimately, where remedy is not possible, the Borrower will, within a reasonable period, shift the Project's primary suppliers to suppliers that demonstrate that they can meet the relevant requirements of ESS2. Before beginning the procurement process, the Borrower will undertake market analysis to identify the possible sellers of renewable energy to the Project. The bidding documents will emphasize forced labor risks in renewable energy components and will require that sellers will not engage or employ any forced labor. Bidders will be required to provide two declarations: a Forced Labor Performance Declaration (which covers past performance) and a Forced Labor Declaration (which covers future commitments to prevent, monitor, and report on any forced labor, cascading the requirements to their own subcontractors and suppliers). In addition, enhanced language on forced labor will be included in the procurement contracts.

V. GRIEVANCE REDRESS SERVICES

83. **Grievance redress.** Communities and individuals who believe that they are adversely affected by a project supported by the World Bank may submit complaints to existing project-level grievance mechanisms or the Bank's Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed in order to address project-related concerns. Project affected communities and individuals may submit their complaint to the Bank's independent Accountability Mechanism (AM). The AM houses the Inspection Panel, which determines whether harm occurred, or could occur, as a result of Bank non-compliance with its policies and procedures, and the Dispute Resolution Service, which provides communities and borrowers with the opportunity to address complaints through dispute resolution. Complaints may be submitted to the AM at any time after concerns have been brought directly to the attention of Bank Management and after Management has been given an opportunity to respond. For information on how to submit complaints to the Bank's Grievance Redress Service (GRS), please visit <http://www.worldbank.org/GRS>. For information on how to submit complaints to the Bank's Accountability Mechanism, please visit <https://accountability.worldbank.org>.

VI. KEY RISKS

85. **The overall risk of this Project is assessed as Moderate.** The political and macroeconomic scenarios in Brazil present considerable uncertainty in the short term. Additionally, this is the first education project in MT, and it comprises a complex design to be implemented at different levels and with the involvement of various stakeholders. MT has shown strong commitment to implementing new activities that improve learning outcomes in the state, and COVID-19 only increased their urgency.



86. **Technical design risk is Substantial.** The risks associated with the technical design of the Project lie in the complexity of its design, which will involve different levels of education and include shared responsibility between municipalities and the state. The Project also includes relevant interventions and reforms in a significant number of areas that requires high-level technical capacity, such as the school connectivity programs and the development of sustainable and resilient schools. Various secretariats and sub-secretariats will share implementation, coordination, monitoring, and reporting responsibilities. To mitigate these risks, a PMU will be established in the NGER with a team including a project coordinator, a deputy coordinator, and senior specialists on FM, procurement, environmental and social management, and communications. This team will interact with the relevant units within SEDUC to ensure coordination across different areas and levels and a timely implementation of all activities. The World Bank will support the PMU with technical assistance to carry out these functions, as needed. In addition, all activities have been identified as key priorities for the Government and are directly aligned with programs or reforms that were started or planned by SEDUC for the next five years, but the activities that requires high-level capacity were prioritized for the medium term.

87. **At this stage, the residual Fiduciary risk is assessed as Substantial.** Currently, the main risks are (i) the nature of the Project's design, which involves municipal education departments and municipal/state schools; (ii) SEDUC's lack of adequate and experienced personnel to manage the Project; (iii) low budget execution that may impact the amount of eligible expenditures to support the PBCs activities for disbursements purposes; (iv) not updated State Administrative System to run the Projects' Financial Statements (IFRs) properly; (v) Annual Audit report to be prepared by a Private Audit Firm and not by the State supreme audit institution (TCE-MT) which may compromise the quality and completeness of audit report. The PMU established at SEDUC's Cabinet Office will strengthen not only the technical coordination across municipal education departments and municipal/state schools, but also SEDUC's fiduciary capacity to monitor the budget execution. Also, the Project will support the update of the State Administrative System and the World Bank will provide training and technical assistance on fiduciary aspects to assure the quality and completeness of audit reports.

VII. RESULTS FRAMEWORK AND MONITORING



PDO Indicators by PDO Outcomes

Baseline	Period 1	Period 2	Period 3	Period 4	Closing Period
Improve teaching practices					
Percentage of 6th grade teachers with improved teaching practices in Portuguese and mathematics in state network (Percentage) ^{PBC}					
Dec/2022	Dec/2024	Dec/2025	Dec/2026	Dec/2027	Dec/2028
0.00	0.00	0.00	5.00	15.00	30.00
Student dropout rate in 10th grade in the state network (disaggregated by gender) (Percentage) ^{PBC}					
Jul/2018	Jul/2024	Jul/2025	Jul/2026	Jul/2027	Jul/2028
13.50	12.80	11.50	10.30	9.20	8.30
➤ Girls' dropout rate in grade 10 in schools of the state network (Percentage) ^{PBC}					
Jul/2018	Jul/2024	Jul/2025	Jul/2026	Jul/2027	Jul/2028
10.90	10.30	9.30	8.30	7.50	6.70
➤ Boys' dropout rate in grade 10 in schools of the state network (Percentage) (Percentage) ^{PBC}					
Jul/2018	Jul/2024	Jul/2025	Jul/2026	Jul/2027	Jul/2028
15.80	15.40	13.80	12.40	11.00	9.90
Improve schools' digital readiness					
Percentage of teachers with improved digital skills (Percentage) ^{PBC}					
Jun/2022	Dec/2024	Dec/2025	Dec/2026	Dec/2027	Dec/2028
0.00	0.00	20.00	35.00	50.00	65.00
Improve schools' learning environment					
Percentage of secondary students with access to sustainable, safe, inclusive, and resilient learning environments in the state network (Percentage) ^{PBC}					
Dec/2022	Dec/2024	Dec/2025	Dec/2026	Dec/2027	Dec/2028
0.00	0.00	4.00	9.00	11.00	13.00

Intermediate Indicators by Components

Baseline	Period 1	Period 2	Period 3	Period 4	Closing Period
Component 1: Strengthen Pedagogical Interventions and School Management Strategies for Learning Recovery					
Percentage of MT municipalities implementing classroom observation tools and coaching for teachers' professional development (Percentage)					
Dec/2022	Dec/2024	Dec/2025	Dec/2026	Dec/2027	Dec/2028
0.00	10.00	20.00	30.00	40.00	50.00



Percentage of teachers that completed a training session on the Alfabetiza MT program (Percentage)					
Aug/2022	Dec/2024	Dec/2025	Dec/2026	Dec/2027	Dec/2028
50.00	60.00	65.00	70.00	75.00	80.00
Percentage of staff trained on management practices to strengthen the coordination with municipalities (Percentage)					
Dec/2022	Dec/2024	Dec/2025	Dec/2026	Dec/2027	Dec/2028
0.00	15.00	30.00	45.00	60.00	70.00
Students benefiting from direct interventions to enhance learning (Number) ^{CRI}					
Jul/2021	Dec/2024	Dec/2025	Dec/2026	Dec/2027	Dec/2028
0.00	10000.00	20000.00	40000.00	80000.00	160000.00
➤ Students benefiting from direct interventions to enhance learning - Female (Number) ^{CRI}					
0.00	5000.00	10000.00	20000.00	40000.00	80000.00
Percentage of teachers trained to prepare and carry out mitigation protocols at the onset of climate change-related emergencies, such as flash floods and droughts (Percentage)					
Jul/2022	Dec/2024	Dec/2025	Dec/2026	Dec/2027	Dec/2028
0.00	10.00	15.00	20.00	25.00	30.00
Component 2: Transform Digital Infrastructure					
Percentage of education staff of the state network trained in the use of the new Education Management and Information System (EMIS) (Percentage)					
Jun/2022	Dec/2024	Dec/2025	Dec/2026	Dec/2027	Dec/2028
0.00	0.00	30.00	35.00	60.00	65.00
Percentage of schools with adequate information technology infrastructure (Percentage)					
Jun/2022	Dec/2024	Dec/2025	Dec/2026	Dec/2027	Dec/2028
0.00	10.00	20.00	30.00	40.00	55.00
Percentage of Indigenous Population and Quilombola schools with connectivity (Percentage)					
Jun/2022	Dec/2024	Dec/2025	Dec/2026	Dec/2027	Dec/2028
0.00	5.00	10.00	20.00	25.00	30.00
Number of state schools implementing ecological disposal mechanisms (Number)					
Jun/2022	Dec/2024	Dec/2025	Dec/2026	Dec/2027	Dec/2028
0.00	50.00	70.00	100.00	120.00	150.00
Percentage of teachers that completed the training on digital skills program (Percentage)					
Jun/2022	Dec/2024	Dec/2025	Dec/2026	Dec/2027	Dec/2028
20.00	25.00	35.00	45.00	55.00	65.00
Number of schools managed by the Connected Education Meter (Number)					
Jun/2022	Dec/2024	Dec/2025	Dec/2026	Dec/2027	Dec/2028
403.00	443.00	487.00	535.00	588.00	620.00



Component 3: Create Green, Resilient, Inclusive, and Safer Schools					
Number of schools rehabilitated (Number)					
Dec/2022	Dec/2024	Dec/2025	Dec/2026	Dec/2027	Dec/2028
133.00	133.00	153.00	173.00	183.00	193.00
Percentage of indigenous populations and Quilombolas schools rehabilitated based on community consultation (Percentage)					
Jul/2022	Dec/2024	Dec/2025	Dec/2026	Dec/2027	Dec/2028
0.00	0.00	5.00	10.00	15.00	20.00
Percentage of school principals and coordinators trained in the use of the School Maintenance Management System (MMS) (Percentage)					
Jul/2022	Dec/2024	Dec/2025	Dec/2026	Dec/2027	Dec/2028
0.00	0.00	0.00	30.00	40.00	50.00
Percentage of teachers, principals, coordinators and secretaries who received school violence prevention training (Percentage)					
Dec/2022	Dec/2024	Dec/2025	Dec/2026	Dec/2027	Dec/2028
0.00	0.00	10.00	30.00	50.00	60.00
Number of teachers, principals, coordinators and secretaries trained in pedagogical strategies to support students with disabilities (Number)					
Jul/2022	Dec/2024	Dec/2025	Dec/2026	Dec/2027	Dec/2028
0.00	500.00	700.00	900.00	1,100.00	1,300.00
Percentage of teachers of indigenous populations and Quilombolas' schools who received training on pedagogical materials culturally adapted to support learning recovery (Percentage)					
Dec/2022	Dec/2024	Dec/2025	Dec/2026	Dec/2027	Dec/2028
0.00	10.00	15.00	20.00	25.00	30.00
Number of new or rehabilitated toilets designed with climate change considerations in their layouts to reduce energy usage through ensuring natural light and ventilation (Number)					
Jul/2022	Dec/2024	Dec/2025	Dec/2026	Dec/2027	Dec/2028
0.00	0.00	20.00	40.00	50.00	60.00
Number of school buildings provided with electricity from renewable energy source through mini-grids/micro-grids/stand-alone systems (Number)					
Jul/2022	Dec/2024	Dec/2025	Dec/2026	Dec/2027	Dec/2028
0.00	0.00	0.00	30.00	30.00	60.00
Component 4: Project Management, Training, Monitoring, and Evaluation					
Citizen Engagement: Number of feedback surveys conducted to assess the beneficiary satisfaction (Number)					
Jul/2021	Jul/2024	Jul/2025	Jul/2026	Jul/2027	Jul/2028
0.00	1.00	2.00	3.00	4.00	5.00

Performance-based Conditions (PBC)



Period		Period Definition			Timeline
Period 1		FY23			2024
Period 2		FY24			2025
Period 3		FY25			2026
Period 4		FY26			2027
Period 5		FY27			2028

Baseline	Period 1	Period 2	Period 3	Period 4	Period 5
1 : SEDUC shall have delivered Personalized Tutoring to at least 20% of State Schools with Adequate Learning Labs (Percentage)					
0.00	5.00	10.00	15.00	20.00	30.00
0.00	6,000,000.00	0.00	0.00	5,000,000.00	0.00
PBC allocation		11,000,000.00	As a % of Total PBC allocation		11.0%
2 : SEDUC shall have implemented Selected Activities of the EWS in at least 50% of State Schools (Text)					
There is currently no Early Warning System to prevent dropout in the MT school network.	A Preventive Alert System for School Dropout and Evasion (Sistema de Alerta Preventivo do Abandono e Evasão Escolar - SAPAE) will be developed and implemented in 5 percent of schools of the state network.	The SAPAE is implemented in 10 percent of the primary and secondary schools of the state network.	The SAPAE is implemented in 20 percent of the primary and secondary schools of the state network.	The SAPAE is implemented in 40 percent of the primary and secondary schools of the state network.	The SAPAE is implemented in 50 percent of the primary and secondary schools of the state network.
0.00	0.00	6,000,000.00	0.00	0.00	4,000,000.00
PBC allocation		10,000,000.00	As a % of Total PBC allocation		10.0%
3 : SEDUC shall have provided Adequate Internet Connection to at least 506 State Schools (Number)					
356.00	386.00	421.00	461.00	506.00	556.00
0.00	8,000,000.00	0.00	0.00	8,000,000.00	0.00
PBC allocation		16,000,000.00	As a % of Total PBC allocation		16.0%
4 : SEDUC shall have deployed and is operating all the Upgraded EMIS Modules, at SEDUC and at State Schools (Text)					
A new Education Management and Information System (EMIS) was not developed.	A new Education Management and Information System (EMIS) is under development. No	One module of the EMIS is operational: Teacher Training Module.	Two modules of EMIS are operational: including the Teacher Training Module,	Three modules of the EMIS are operational: including the Teacher Training Module, School	Four modules of EMIS are operational: including the Teacher Training Module, School Infrastructure



	modules have been completed and deployed yet.		and School Infrastructure Management Module.	Infrastructure Management Module, and Curricular Matrices and Student Enrollment module, including geospatial location-based assignment.	Management Module, Curricular Matrices and Student Enrollment module, including geospatial location-based assignment, and Student Attendance and Grade Recording module.
0.00	0.00	2,000,000.00	0.00	2,000,000.00	0.00
PBC allocation		4,000,000.00	As a % of Total PBC allocation		4.0%
5 : SEDUC shall have developed and deployed the MMS in at least 50% of State Schools (Text)					
The MMS system was not developed.	Development or adaptation of MMS regulatory framework, allocation of annual budget, and definition of the technical team (includingengineers and architects) to operate the system.	The MMS was deployed in 30 schools of the state network.	The MMS system is implemented in 20 percent of primary and secondary schools of the MT state network.	The MMS system is implemented in 40 percent of primary and secondary schools of the MT state network.	The MMS system is implemented in 50 percent of primary and secondary schools of the MT state network.
0.00	0.00	5,000,000.00	0.00	3,000,000.00	0.00
PBC allocation		8,000,000.00	As a % of Total PBC allocation		8.0%
6 : SEDUC shall have developed the VPP and carried out Selected Activities of the VPP in at least 70% of State Schools (Text)					
A state violence prevention plan was not developed.	A state violence prevention plan is developed, published and disseminated.	The plan is implemented in 10 percent of state primary and secondary schools.	The plan is implemented in 30 percent of state primary and secondary schools.	The plan is implemented in 50 percent of state primary and secondary schools.	The plan is implemented in 70 percent of state primary and secondary schools.
0.00	0.00	5,000,000.00	0.00	0.00	2,000,000.00
PBC allocation		7,000,000.00	As a % of Total PBC allocation		7.0%



ANNEX 1: Implementation Arrangements and Support Plan

1. **Implementing agency.** The Mato Grosso State Secretariat of Education (SEDUC) will be responsible for coordinating, monitoring, and reporting on the overall project activities and its results. A PMU will be established within SEDUC to execute this operation in NGER. The PMU will be responsible for the implementation of Component 4. Other sub-secretariats will implement and monitor specific components and subcomponents, reporting back to NGER/SEDUC: (a) SAGE will oversee all pedagogical development related activities, (b) SAGR will be responsible for the regional management and monitoring the implementation of activities at the level of regional directorates, (c) SAAS will execute all fiduciary aspects of the operation (FM and procurement), (d) SAIP will coordinate and execute all construction works and the IT activities, and (e) SAGP will coordinate and execute capacity-building activities.
2. **The PMU will form a core team that will include a project coordinator, a deputy coordinator, a senior FM specialist, a senior procurement specialist, an M&E specialist, a senior environmental management specialist, a senior social management specialist, and a communications specialist.** The PMU will assign a focal point within its structure to each of the sub-secretariats and other participating agencies to enable closer coordination and monitoring of results and activities. External consultants will be hired, as required, to guarantee the essential support to the PMU.
3. **SEDUC's downstream monitoring of the project's implementation will be supported by the 15 recently created DRE.**⁵⁰ The DREs are organizational structures, subordinated to SEDUC, whose mission is to manage the implementation, monitoring, and evaluation of basic education policy in school unit jurisdictions, ensuring students' access to school, retention in schools, and quality as it relates to learning. Subordinated to SAGR, SURE will be responsible for advising and monitoring the school network, including school mediation and the school census and SUDR will be responsible for supervising the activities implemented by all DREs. The DREs will implement activities by the means of six coordination offices (*coordenadorias*). Each DRE will monitor its own indicators and send data to SEDUC for consolidation.
4. **Component 1: Strengthen Pedagogical Interventions and School Management Strategies for Learning Recovery** aims to reduce school dropouts by implementing tailored interventions to address students' needs in support of their recovery from learning losses, focusing on the most vulnerable children in high dropout risk areas. This component will be fully implemented by SAGE, through the Superintendence of Basic Education (*Superintendência de Educação Básica*, SUEB), which will be responsible for (a) all the pedagogical activities of urban schools and within basic education, including curricular assessment and (b) the implementation of all subcomponents. *Subcomponent 1.1: Promote learning and schooling recovery interventions* will include implementation of personalized tutoring, development of structured pedagogical material, and design and implementation of an EWS. This subcomponent will also support a TPD program to improve teachers' pedagogical techniques, including peer-to-peer learning systems, feedback mechanisms, and classroom observation tools. *Subcomponent 1.2: Strengthen school management and promote state-municipality cooperation and cost efficiency* will include target-based incentive and collaborative systems with the state's municipalities to strengthen

⁵⁰ DREs were created by Law No. 11.668, of January 11, 2022, and are regulated by Decree No. 1.293 of February 15, 2022.



commitment and engagement in delivering the state's educational strategies. This subcomponent aims to improve the capacity of lower-capacity municipalities through technical assistance.

5. **Component 2: Transforming Digital Infrastructure** aims to improve SEDUC's and state schools' digital infrastructure as well as enhance school management systems and boost digital literacy for teachers and students. This component will involve three sub-secretariats: SAGE, SAIP, and SAGP. *Subcomponent 2.1: Improve schools' connectivity and digital skills* will involve the purchase (preferably of devices with a 'carbon transparency label', minimizing the carbon footprint) and maintenance of IT equipment to improve schools' connectivity and will be implemented by SUTI. The capacity-building activities to improve the digital schools of teachers and students will be implemented by SAGP. Under *Subcomponent 2.2: Upgrade the existing Education Management and Information System (EMIS)*, SUTI, which is part of SAIP, will implement and monitor the EMIS upgrading, develop the geospatial student registration portal and the geospatial school bus routing system, and enhance the LMS to support online training and hybrid education.

6. **Component 3: Creating Green, Resilient, Inclusive and Safer State Schools** supports investments to rehabilitate school infrastructure and strategies for violence prevention and inclusive education. *Subcomponent 3.1: Rehabilitate and maintain safe, inclusive, green, and infrastructure* will be implemented by SAIP, through the Superintendence of Works and Property (*Superintendência de Obras e Patrimônio*, SUOP), which will be the main implementer of this subcomponent, as it will involve works and construction, including energy-efficient solutions and WASH infrastructure. The activities of Component 3 aim to enhance inclusion and reduce vulnerabilities, so it will include consultations with minority and vulnerable groups, such as peoples with disabilities, rural populations, *Quilombolas*, and indigenous peoples. Thus, *Subcomponent 3.2: Promote violence prevention and inclusive education in schools* will be implemented by the Superintendence for Diversity (*Superintendência de diversidades*, SUDI) under SAGE.

Fiduciary

7. **The Bank performed a FMA of SEDUC, which will undertake the primary fiduciary responsibilities of the Project, in accordance with the Bank Policy:** "Investment Project Financing and Bank Directive: Investment Project Financing and the Financial Management in Bank-Financed Operations and Other Operational Matters" (effective September 7, 2021).

8. **Staffing:** To ensure appropriate financial staffing arrangement, one month after loan effectiveness, the PMU under SEDUC will allocate two civil servants from the budget, financial, and accounting areas (*Gestão Financeira, Desembolsos e Licitações*) within the Adjunct Secretariat of Systemic Administration (*Secretaria Adjunta Administrativa Sistêmica*, SAAS), that holds good technical and fiduciary backgrounds to undertake all FM-related tasks ensuring segregation of functions, as detailed on the POM. In addition, at least one focal point of each sub-secretariat and other participating agencies (under the coordination of SEDUC) should be assigned to enable close coordination and monitoring of results and activities. The FM staff should be trained in all the necessary government budget, accounting, administrative rules, and procedures and attend all fiduciary training provided by the World Bank throughout Project implementation.



9. **Planning and Budgeting:** The budget cycle includes planning and implementing all government activities, which reflects in the PPA, LDO, and LOA⁵¹. The State's budget process is clearly defined, follows Law 4.320/64, and the budget and financial accounting frameworks align with Brazilian regulations. The procedures in place to plan Project activities, prepare related budgets, and collect information from the other entities involved in the execution of the Project are satisfactory. To allow budget execution, SEDUC has already adjusted the PPA (2020/2023). And the PLOA⁵² for 2023 has already been submitted for approval. The PLOA includes the Project's activities in the specific budget lines. The PLOA should be approved by the end of 2022. SEDUC should ensure the LOA 2023's approval, including this Project's specific budget lines, one month after loan effectiveness.

10. **Accounting:** The FIPLAN provides adequate account for and control transactions and records in real-time and individually. It includes detailed information on the budgetary and financial execution of the budget units, referring to revenue and expenditure and other transactions that affect or may affect the entity's financial performance and financial position.

11. **Internal Control/Internal Audit:** All Project budgeting and accounting transactions will be processed through FIPLAN. The first stage of the expenditures is the commitment (*empenho*) which is approved by the PMU, acquisition, verification, and certification (*liquidação*); and the final payment (*pagamento*) is made by SEDUC. The approval and authorization controls are adequate to approve and make the necessary payments according to the State's regulations. This process is included in the POM. All Project transactions will be reconciled monthly with the budget and procurement reports. Additionally, the PBC procedures are included in the POM and describe the list of suitable materials to be financed under the loan and the procedures for procuring materials. The eligible expenditure categories are defined in the POM. The POM also include i) the indicators, ii) the respective roles and responsibilities, iii) the application, iv) the evaluation process, v) the funding modalities, and vi) the monitoring arrangements.

12. **The CGE/MT is responsible for supporting the State's direct and indirect agencies on legal procedural compliance for contracting public expenditures and complying with the public information access law.** It is also responsible for internal auditing-related functions and specific aspects of internal control and for coordinating, executing, evaluating, supporting, and guiding the activities inherent to the internal control of the Executive Branch of the State of Mato Grosso, according to the State's Constitution, which established the Integrated System of Internal Control of the Executive Branch of the State of Mato Grosso. The CGE/MT will implement the Internal Audit Capability Model (IA-CM)⁵³, issued by the Institute of Internal Auditors (IIA), to strengthen the internal audit functions in all entities that execute the State budget. IA-CM is a framework that identifies the fundamentals needed for effective internal auditing in the public sector and intends to ensure that the internal audit becomes an integral component of effective governance in the public sector and helps organizations achieve their objectives and account for their results. IA-CM consists of five levels, tied to leading practices. Level 3 (integrated) is where internal audit management and professional techniques are uniformly applied following international procedures. The Project "Progestão – Mato Grosso" (P178339) supports the government's effort to achieve level 3 of IA-

⁵¹ PPA–Plano Plurianual, LDO–Lei de Diretrizes Orçamentárias, LOA–Lei Orçamentária Anual which includes the Government's goals and programs that are approved by State Legislative Branch every four years (PPA) and annually (LDO and LOA).

⁵² PLOA – Projeto de Lei Orçamentária Anual or "Annual Budget Bill" submitted by the Executive Power to Congress, including the proposal for next year's budget for total estimated income and expenses.

⁵³ Internal Audit Capability Model (IA-CM): an internationally recognized framework that identifies the foundations necessary for effective internal auditing to meet the organization's management needs and the professional expectations of the role (CONACI – "Conselho Nacional de Controle Interno" or National Board of Internal Control).



CM by MTR - midterm review⁵⁴. Although the Bank is not financing (through this Project) any activities towards the achievement of Level 3, it will follow up on it throughout the Project's life, as it is directly related to the achievement and sustainability of the PDO.

13. The internal audit department in the CGE/MT is expected to evaluate the adequacy and effectiveness of the internal control in the Project implementing agencies throughout Project implementation. The Project will be included in the Annual Audit Plan and the PAINT system⁵⁵ within one month after loan effectiveness.

14. Anticorruption Arrangements: Borrower Actions to Prevent and Combat Fraud and Corruption in connection with the Use of Loan Proceeds. In furtherance of the above-stated purpose, the Borrower will: take all appropriate measures to prevent Fraud and Corruption in connection with the use of Loan proceeds, including (but not limited to) (a) adopting appropriate fiduciary and administrative practices and institutional arrangements to ensure that the proceeds of the Loan are used only for the purposes for which the Loan was granted, and (b) ensuring that all of its representatives involved with the project, and all recipients of Loan proceeds with which it enters into an agreement related to the Project, receive a copy of the Bank's IPF Anti-Corruption Guidelines and are made aware of its contents; immediately report to the Bank any allegations of Fraud and Corruption in connection with the use of Loan proceeds that come to its attention; if the Bank determines that any person or entity referred to in (i) above has engaged in Fraud and Corruption in connection with the use of Loan proceeds, take timely and appropriate action, satisfactory to the Bank, to address such practices when they occur; include such provisions in its agreements with each recipient of Loan proceeds as the Bank may require giving full effect to the Bank's IPF Anti-Corruption Guidelines; cooperate fully with representatives of the Bank in any investigation into allegations of Fraud and Corruption in connection with the use of Loan proceeds; and if the Bank declares any recipient of Loan proceeds ineligible take all necessary and appropriate action to give full effect to such declaration.

15. Funds Flow and Disbursement Arrangements: The disbursement methods used under this Project will be based on the Disbursement Guidelines for IPF, dated February 2017. The proposed funds flow and disbursement arrangements are streamlined within the proposed Project to facilitate execution, avoid unnecessary incremental operational arrangements, and rely on the existing country's public financial management systems as much as possible. SEDUC will make all payments for all components using the FIPLAN system once payment obligations have been incurred, verified, and adequately documented. For payments to be made, the system requires that funds be committed by source, making possible tracking of loan disbursements to the proposed Project expenditures. The disbursement of Project funds will be processed following the World Bank's procedures as stipulated in the Legal Agreement and Disbursement and Financial Information Letter. SEDUC will open a segregated DA⁵⁶, in Banco do Brasil, in Cuiabá, in the name of the "Secretaria de Estado de Educação" within one month after loan effectiveness, to receive loan funds in USD. Two other operational accounts, exclusive to the Project, will also be opened, in Reais – one for reimbursement of IPF with PBCs, and one for the account for local payments in R\$ - including the deposits of scholarships. Withdrawal applications and supporting

⁵⁴ According to CGE's implementation status of the IA-CM and the Action Plan, there are two KPAs (3.6 – Risk Base Audit and 3.9 – Cost Information) that needs to be complete by CGE-MT to achieve level 3. KPA – Key Process Areas: a total of forty-one KPAs, which define the technical-operational maturity of an internal audit unit, taking into consideration how it establishes, implements, measures, controls, and improves its processes and practices.

⁵⁵ Internal Control Annual Plan (Plano Annual de Auditoria Interna)

⁵⁶ To be opened within 30 days of loan effectiveness. This is not a condition of effectiveness.



documentation will be submitted to the World Bank electronically through the Client Connection website. Simplified procedures governing the PBC will be developed in the POM. Retroactive financing will be allowed for this Project up to an aggregate amount not to exceed twenty percent of the loan amount for payments made for expenditures one year before the signing date of the Legal Agreement, in line with applicable IPF policies. The minimum application size for direct payments and reimbursements will be US\$500,000 equivalent. The Project will also have four months after the closing date to document expenditures incurred before the closing date. The Front-end fee (FEF) will not be financed with bank's resources.

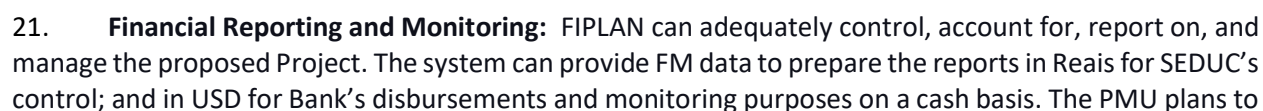
16. IPF-PBCs: Eligible Expenditures Program (EEP) Detailed Disbursement Arrangements. For the EEP subcomponents, disbursements will be made through the reimbursement method based on the achievement of agreed and documentation of expenditures made under the agreed EEPs in the period. The State's legislation mandates that all Project funds must be deposited into the designated account to be opened exclusively for the Project.⁵⁷ The Bank may finance up to 100 percent of eligible expenditures under the EEPs, procured following the applicable Bank's procurement procedures and Anti-Corruption guidelines for this Project. Disbursements would be report-based (i.e., based on IFRs), which would include an EEP Spending report stating the spending status of the EEPs, PBCs compliance with its methodology, which will be verified by the Bank every semester, following the verification protocols, as detailed in the POM. SEDUC will submit to the Bank a withdrawal application for reimbursement in the amount corresponding to the allocation of the PBCs achieved per semester as shown in the Disbursement Schedule. The External Verification Agencies (EVA) are private institutions that will provide independent verification of the achievement of the PBCs. SEDUC will hire the EVA upon the Project's signing under subcomponent 4.1. The EVA is deemed acceptable to the World Bank if it has the necessary independence, experience, and capacity to ensure credible verification. The amount eligible for disbursement and calculated after verifying the PBCs applicable for each semester, verified annually. All PBCs in this Project are scalable; the World Bank will disburse the amount corresponding to the fraction of achievement of the respective PBCs in case of underperformance. The amounts reduced due to the underperformance of scalable PBCs can be attained by achieving the PBCs targets in future years. The undisbursed amount allocated to the correspondent PBC in the previous period will be added to the next planned disbursed amount, and disbursement will be authorized only in case of achievement of the PBC for the subsequent period. If the borrower fails to provide enough eligible expenditures under the EEPs in respect to all disbursements for a PBC that has been met (or that has been partially completed), then the undisbursed amount due to lack of eligible expenditures will be available to be requested by SEDUC in the subsequent application when enough eligible expenditures are presented to the Bank.

17. IPF Only - Detailed Disbursement Arrangements: For the non-EEP subcomponents, the following disbursement methods may be used to withdraw funds: (a) reimbursement, (b) advance, and (c) direct payment, with the advance method being the primary disbursement method. The flow of funds will be made through Advances to the Designated Account to be opened in USD at Banco do Brasil, in Cuiabá, MT, in the name of the SEDUC. The PMU will report on the use of advances through IFRs. For Advances, disbursements will be documented based on the IFRs, submitted to the Bank within 60 days from the end of each semester, following the prescribed agreed format. Reimbursements will also be documented by

⁵⁷ Complementary Law, no. 360, 06/18/2019 – article 10. §2.

18. **Scholarships has been added to Component 4 as part of the IPF only.** Scholarships will be accounted for using a specific chart of accounts managed by SEDUC in conjunction with the Training Coordination Department (*Coordenadoria de Formação*, COFOR). The process will follow the approved state law and the state's procurement process. Monthly, COFOR will review and validate the services rendered based on the receipt of mandatory documents: (i) trainer's Report of work performed; (ii) training/mentoring Attendance List; (iii) additional documents such as videos, photos, etc; and (iv) fellowship DRE Report Evaluation Report. Upon COFOR's review, payments will be authorized based on the list of eligible pre-registered names and amounts. In addition, SEDUC will also perform another review based on COFOR's validation. Once validation has been finalized, SEDUC will authorize the payments to the program participants (per the pre-registered tax identification number (CPF) and registration number (*matricula*). Deposits are made directly into the specific beneficiary's bank account. All support documentation is appropriately retained and archived by COFOR and SEDUC for audit purposes.

20. Below is the fund of flows:





contract a specialized consultancy company to develop the IFRs directly from the FIPLAN system in Reais and USD. As a result, the PMU will ensure the timely production of semiannual IFRs, in USD, for further submission to the Bank within 60 days after the end of each semester. SEDUC should submit the IFRs (the automated format and content) for Bank validation two months after loan effectiveness.

22. **Accordingly, the format and content of the IFRs will cover the following items:** IFR 1 - Sources and Uses of Funds by disbursement category, with evidence of the World Bank's share in the financing of expenditures, cumulative (Project-to-date, year-to-date, and for the period) versus actual expenditures, including a variance analysis; IFR 2 - Uses of Funds by Project Activity or Component and subcomponent, cumulative (Project-to-date, year-to-date, and for the period) versus actual expenditures, including a variance analysis; IFR 3 - Designated Account bank reconciliation and Bank statements; IFR 4 - Disbursement Forecast; IFR5 - Procurement/Contracts.

23. **Counterpart funds in the amount of US\$25 million will be accounted and reported as the amounts executed under any Project components but not claimed for reimbursement under the Project.**

24. **External Auditing:** For Project's purposes, the annual financial statements will be audited by independent auditors⁵⁸, according to the ToR acceptable to the World Bank (prepared by the PMU and approved by the Bank, not later than one month after loan effectiveness and following the International Standards on Auditing (ISAs) issued by The International Auditing and Assurance Standards Board (IAASB) of the International Federation of Accountants (IFAC) or national auditing standards if, as determined by the Bank, these do not significantly depart from international standards. The audited financial statements will be prepared following the accounting standards acceptable to the Bank (i.e., IPSAS or national accounting standards where, as determined by the Bank, they do not significantly depart from international standards). The auditors should be hired within three months after loan effectiveness. **According to the World Bank's guidelines, the auditors will also have to prepare a Management Letter, where any internal control weaknesses will be identified, contributing to strengthening the control environment.** The auditor's report will be submitted to the World Bank no later than six months after the closing of the fiscal year, and the annual audit may be financed out of the loan proceeds.

25. **The General Conditions require the Borrower to retain all records (contracts, orders, invoices, bills, receipts, and other documents) evidencing eligible expenditures and to enable the World Bank's representative to examine such records.** They also require the records to be retained for at least one year following receipt by the World Bank of the final audited financial statement required in accordance with the Legal Agreement or two years after the closing date, whichever is later. The Borrower is responsible for ensuring that document retention beyond the period required by the Legal Agreement complies with its government's regulations.

26. **Conditions or Nonstandard/Significant Financial Covenants (i.e., Relevant issues to be included in the Legal Documents).** There are no FM-related conditions for Board and/or Effectiveness.

⁵⁸ During the appraisal, TCE-MT (Tribunal de Contas do Mato Grosso), did not show interest to audit the project. The State Audit Court (TCE) is responsible for the State's external scrutiny, and the legislature plays an external oversight role. The State has been able to prepare timely financial statements of reasonable quality. According to the last audit reports (2019, 2020, and 2021), the TCE-MT identified some exceptions, but they did not compromise the overall consistency and usefulness of the financial statements. TCE-MT has conducted audits of reasonable scope, and its reports are timely.



Disbursement Arrangements

27. **SEDUC/MT will open a segregated Designated Account in Banco do Brasil in Cuiabá, in the name of the ‘Secretaria de Estado de Educação’, within one month after loan signing, to receive loan funds in US dollars.**⁵⁹ Two other operational accounts, exclusive to the Project, will also be opened, in Reais – one for reimbursement of IPF with PBCs, and one for the account for local payments in R\$ - including the deposits of scholarships. Withdrawal applications and supporting documentation will be submitted to the World Bank electronically through the Client Connection website. Simplified procedures governing the PBC will be developed in the POM.

28. **The disbursement of project funds will be processed following World Bank procedures stipulated in the Legal Agreement and in the Disbursement and Financial Information Letter.** During project implementation, the following disbursement methods will be available: reimbursement, direct payment, and advances. The primary disbursement method will be reimbursement per the eligible expenditures and then advance. The Designated Account will have a variable ceiling based on the submission of forecasts of expenditures to be paid in the next six months and recorded in the Disbursement Letter that will be prepared by the World Bank’s Loan Department.

Table A1.1. Category of Expenditures and Financing Percentages (expressed in US\$)

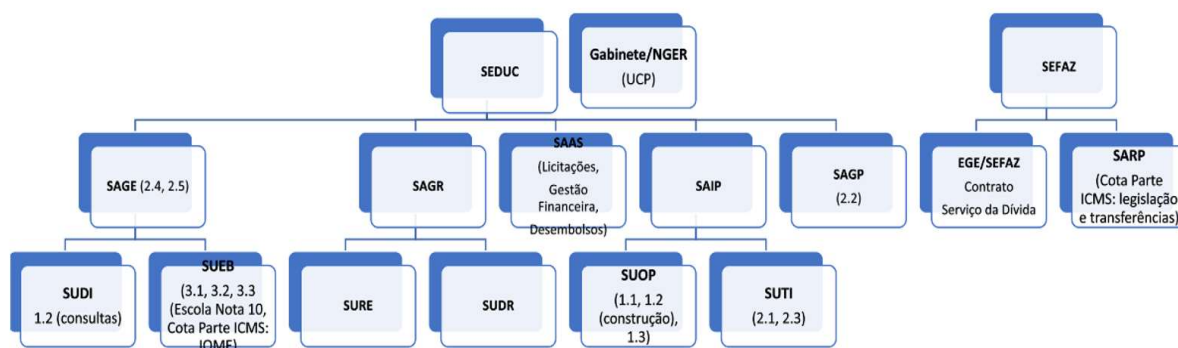
Category	Amount of the Loan Allocated (US\$)	Percentage of Expenditures to be Financed (Inclusive of Taxes)
1. Eligible Expenditures Program for Part of the Project (Subcomponents 1.1, 1.2, 2.1, 2.2, 3.1 [excluding works and, goods], 3.2), including, consulting services, non-consulting services, training, and operational costs	56,000,000	100
2. Works and goods (Subcomponent 3.1)	38,000,000	100
3. Works, goods, consulting services, non-consulting services, training, operational costs and scholarships (Subcomponents 4.1 and 4.2)	6,000,000	100
Total Amount	100,000,000	

29. **Procurement. Procurement under the project will be carried out in compliance with the ‘World Bank’s Procurement Regulations for IPF Borrowers’, dated July 1, 2016 and revised in November 2020.** The procurement of all activities will be carried out by SAGR, through SAAS. Training on the World Bank’s Procurement Regulations will be conducted before implementation starts, as this project covers the procurement of goods, works, consulting services, and non-consulting service contracts. Procurement arrangements shall follow all particularities and context described in the PPSD document, which was prepared and submitted by the Borrower on December 7th, 2022. The document was submitted along with the Procurement Plan contemplating the first eighteen months through the STEP system (Systematic Tracking for Exchanges in Procurement) the official interface with the Bank regarding the project’s procurement activities.

⁵⁹ To be opened within 30 days of loan signing. This is not a condition of effectiveness.



Figure 1.1. Project Implementation Organizational Chart



Implementation Support Plan

30. The following implementation support strategy reflects the preliminary estimates of skill requirements, timing, and resource requirements over the life of the project. The implementation support plan will be reviewed periodically to ensure that it continues to meet the implementation support needs of the project. Table 3 indicates the World Bank team’s implementation support plan and the required skill mix. Table 4 indicates skill mix and team composition.

Table A1.2 Implementation Support Plan and Skills Mix

Time Needed	Focus	Skills
Year 1	- Ensure Project budgeting and allocation - Monitor PBCs and Results Framework - Establish baselines for all indicators - Fine-tune PBC verification mechanisms, including contracting EVAs, and their effectiveness - Review staffing of implementing agency - Assist client in formulation of terms of reference and assessment of resources required to implement Project components - Determine TA needs, including capacity building of the PMU	- Project management, monitoring, and evaluation - Operations and implementation support - Impact evaluation design - Financial management - Procurement management - ESF management
Years 2-4	- Monitor Program budgeting and allocation - Monitor PBCs and Results Framework - Review evidence for PBC achievement according to verification protocols - Review technical performance - Assess fiduciary performance - Monitor E&S performance - Carry out Mid-Term review to assess the Project’s performance and identify if any changes are needed in the Project’s design	- Project management, monitoring, and evaluation - Operations and implementation support - Impact evaluation design - Financial management - Procurement management - ESF management
Year 5	- Monitor Project budgeting and allocation - Complete all planned infrastructure works - Monitor PBCs and Results Framework	- Project management, monitoring, and evaluation - Financial management



Time Needed	Focus	Skills
	- Assess technical, fiduciary, and E&S performance - Review results reports for pilots carried out during the Project - Begin collecting data for the implementation completion and results report in the final 6 months of implementation	- Procurement management - ESF management

Table A1.3 Skills Mix and Annual Level of Effort

Skills Needed	No. of Staff Weeks	Number of Missions	Comments
Task team leader(s)	12	Two per year	Task team leader and co-task team leader
Procurement specialist	3	Two per year including field travel	Staff in Brasilia, Brazil
FM specialist	3	Two per year including field travel	Staff in Brasilia, Brazil
Social specialist	3	Two per year including field travel	Staff in Brasilia, Brazil
Environmental specialist	3	Two per year including field travel	Staff in Brasilia, Brazil



ANNEX 2: Performance-Based Conditions Disbursement and Verification Protocol

1. **The PBCs were selected to incentivize key reforms or actions associated with the project's objectives.** The confirmation that a PBC is achieved will be based on agreed verification protocols. Once the achievement of an indicator is verified, the Government can request the corresponding disbursement. PBCs can be scalable, as established in the verification protocol. Thus, if the full target is not achieved within the established period, disbursement can be proportional to the extent of achievement of the corresponding PBC. Undisbursed amounts can be transferrable until such PBC is satisfactorily met (within the project implementation period).

Verification Protocol Table: Performance-Based Conditions

PBC 1	SEDUC shall have delivered Personalized Tutoring to at least 20% of State Schools with Adequate Learning Labs
Description	This PBC will monitor the percentage of state schools implementing Personalized Tutoring in adequate Learning Labs.
Data source/ Agency	SAGE (SEDUC) reports and school census
Verification Entity	External Verification Agency based on SAGE (SEDUC) reports and sample-based verification (field visits) and school census.
Procedure	The methodology to be followed is: (i) Identify the number of primary and secondary state schools implementing Personalized Tutoring in adequate Learning Labs; (ii) Identify the number of primary and secondary state schools; (iii) divide (ii) by (i). The adequate Learning Labs requires the achievement of three conditions: (i) basic Lab kit including furniture and devices installed (to be defined in agreement with SEDUC); (ii) structured materials for students and teachers available; (iii) trained teacher or tutor on tutoring pedagogical practices (different levels depending on the student grade and learning needs). Sample-based verification (field visits) means one onsite visit to each of a representative sample of state schools.
PBC 2	SEDUC shall have implemented Selected Activities of the EWS in at least 50% of State Schools
Description	The PBC will monitor the percentage of state schools implementing the Early Warning System to prevent students' dropout and evasion.



Data source/ Agency	SUTI (SEDUC) new EMIS reports and school census
Verification Entity	External Verification Agency (EVA) based on the new EMIS reports, sample-based verification (field visits), and school census.
Procedure	The methodology to be followed is: (i) Identify the number of primary and secondary state schools implementing the Early Warning System; (ii) Identify the number of of primary and secondary state schools; (iii) divide (ii) by (i). The implementation of Early Warning System requires the achievement of three conditions: (i) implementation of a preventive alert system of school dropout, including enrollment system to monitor school attendance; (ii) implementation of protocols to identify risks of dropping out; and (iii) implementation of identified procedures to intervene. Sample-based verification (field visits) means one onsite visit to each of a representative sample of state schools.
PBC 3	SEDUC shall have provided Adequate Internet Connection to at least 506 State Schools
Description	This PBC will monitor the number of primary and secondary schools of the state network with adequate internet connection.
Data source/ Agency	SUTI (SEDUC) reports
Verification Entity	External Verification Agency based on SUTI (SEDUC) reports and sample-based field visit verification.
Procedure	Identify the number of primary and secondary schools of the state network with adequate internet connection. The adequate internet connection need to be in accordance to the number of students, as per existing guidance of the Ministry of Education (MEC) on adequate Internet being defined as a minimum of 100Kbps per student. Sample-based verification (field visits) means one onsite visit to each of a representative sample of state schools.
PBC 4	SEDUC shall have deployed and is operating all the Upgraded EMIS Modules, at SEDUC and at State Schools
Description	This PBC aims at monitoring the upgrade of the existing Education Management and Information System (EMIS).
Data source/ Agency	SUTI (SEDUC) new EMIS reports
Verification Entity	External Verification Agency based on the new EMIS reports sample-based verification (field visits)



Procedure	The upgrade of the new EMIS means that the modules are developed and deployed at the SEDUC and school levels. At the SEDUC level, the EVA will verify the achievement by analyzing the software documentation (technical manuals and online material) submitted by SEDUC verifying the operational status of the new EMIS different modules. At the school level, the EVA will conduct sample-based verification (field visits) of the deployment of the new EMIS different modules. Some of the modules expected are: 1. Teacher training module 2. School infrastructure management module 3. Curricular matrices and student enrollment module, including geospatial location-based assignment 4. Student attendance and grade recording module 5. Teacher management module 6. Transport management module, including geospatial location school bus routes management Sample-based verification (field visits) means one onsite visit to SEDUC and to each of a representative sample of state schools.
PBC 5	SEDUC shall have developed and deployed the MMS in at least 50% of State Schools
Description	The PBC will monitor the development and implementation of the School Infrastructure Maintenance Management System (MMS) in state schools
Data source/ Agency	SUTI (SEDUC) reports
Verification Entity	External verification agent (EVA) based on SUTI (SEDUC) reports and sample-based verification (field visit)
Procedure	The development of the MMS will be verified based on SUTI (SEDUC) reports, analysis of the documentation of the system, and test of the system. The deployment of the MMS will be verified based on sample-based verification (field visit) of primary and secondary school on (i) the system capacity to rehabilitate and maintain the current school network to be more safe, inclusive, green, and resilient, (ii) the analysis of the flow of funds, and (iii) provision of training of the school administrators to assure the sustainability of the system. Sample-based verification (field visits) means one onsite visit to SEDUC and to each of a representative sample of state schools.



PBC 6	SEDUC shall have developed the VPP and carried out Selected Activities of the VPP in at least 70% of State Schools
Description	The indicator will monitor the percentage of secondary schools in the state network implementing the violence prevention plan
Data source/ Agency	SAGE (SEDUC) reports and school census
Verification Entity	External Verification Agency (EVA) based on SAGE (SEDUC) reports, school census, and sample based verification (field visit)
Procedure	The methodology to be followed is: (i) Identify the number of secondary schools in the state network implementing at least one activity of the violence prevention plan based on the estimation in a representative sample of secondary schools; (ii) Identify the number of secondary schools in the state network based on the schools census; (iii) divide (i) by (ii). The analysis of the implementation of the violence prevention plan in schools will consider the following activities: (i) establish an optimal intensity -which will depend on the scope of activities -, and the duration and frequency of sessions, and overall program length, enables time for reflection and experiential learning; (ii) define a clear leadership that is responsible for the intervention's implementation; (iii) consider incentives for the participants, for example, for the teachers; (iv) involve the entire school community, not only students, teachers, principals, and school staff, but also the parents and communities where the schools are located; and (v) focus on the program's implementation. Sample-based verification (field visits) means one onsite visit to each of a representative sample of state schools.



Table 2.1. Estimated PBC Disbursement and Allocated Amount Per Category

PBC		Amount (US\$, millions)				
		FY23	FY24	FY25	FY26	FY27
PBC 1	SEDUC shall have delivered Personalized Tutoring to at least 20% of State Schools with Adequate Learning Labs	6.0			5.0	
PBC 2	SEDUC shall have implemented Selected Activities of the EWS in at least 50% of State Schools		6.0			4.0
PBC 3	SEDUC shall have provided Adequate Internet Connection to at least 506 State Schools	8.0			8.0	
PBC 4	SEDUC shall have deployed and is operating all the Upgraded EMIS Modules, at SEDUC and at State Schools		2.0		2.0	
PBC 5	SEDUC shall have developed and deployed the MMS in at least 50% of State Schools			5.0		3.0
PBC 6	SEDUC shall have developed the VPP and carried out Selected Activities of the VPP in at least 70% of State Schools		5.0			2.0
Total PBC per year		14.0	13.0	5.0	15.0	9.0
Non-PBC activities under Subcomponent 3.1		38.0				
Non-PBC project management, monitoring, and evaluation under Component 4		1.5	1.5	1.0	1.0	1.0
Total		53.5	14.5	6.0	14.0	12.0
Total cumulative		53.5	68.0	74.0	88.0	100.0

Table 2.2. Components, Subcomponents, and Description of Expenditures

Component	Subcomponent	Program Budget Lines	Description and Amount of Expenditures	
			Procurable Inputs	Non-Procurable Inputs
Component 1: Strengthen Pedagogical Interventions and School Management Strategies for Learning Recovery (US\$21 million)	Subcomponent 1.1: Promote learning and schooling recovery interventions (US\$16 million)	339035 - Consulting services 339039 - Other third-party services - firm 449052 - Equipment and permanent material	Consultancy services (individual and firm) Non-consultancy services	Training, Workshops (including logistics) Services and operational costs
	Subcomponent 1.2: Strengthen school management and promote state-municipality cooperation and cost efficiency (US\$5 million)	339035 - Consulting services 339036 - Other third-party services - individual 339039 - Other third-party services - firm	Consultancy services (individual and firm) Non-consultancy services	Training, Workshops (including logistics) Services and operational costs



Component	Subcomponent	Program Budget Lines	Description and Amount of Expenditures	
			Procurable Inputs	Non-Procurable Inputs
Component 2: Transforming Digital Infrastructure (US\$20 million)	Subcomponent 2.1: Improve schools' connectivity and digital skills (US\$16 million)	339035 - Consulting services 339036 - Other third-party services - individual 339039 - Other third-party services - firm 339040 - Information and communication technology services - firm 449052 - Equipment and permanent material	Consultancy services (individual and firm) Non-consultancy services Goods (equipment)	Services and operational costs
	Subcomponent 2.2: Upgrade the existing Education Management and Information System (EMIS) (US\$4 million)	339035 - Consulting services 339039 - Other third-party services - firm	Consultancy services (individual and firm) Non-consultancy services	Training, Workshops (including logistics) Services and operational costs
Component 3: Creating Green, Resilient, Inclusive and Safer State Schools (US\$53 million)	Subcomponent 3.1: Rehabilitate and maintain safe, inclusive, green, and resilient schools (US\$46 million)	339035 - Consulting services 339039 - Other third-party services - firm 339040 - Information and communication technology services - firm	Consultancy services (individual and firm) Non-consultancy services	Services and operational costs
		449051 - Works and installations 449052 - Equipment and permanent material	Works (construction) Goods (equipment)	
	Subcomponent 3.2: Promote violence prevention and inclusive education in schools (US\$7 million)	339035 - Consulting services 339036 - Other third-party services - individual 339039 - Other third-party services - firm	Consultancy services (individual and firm) Non-consultancy services, training	Training, Workshops (including logistics)
Component 4: Project Management, Training, Monitoring and Evaluation (US\$5.75 million)	Subcomponent 4.1: Project coordination (US\$2 million)	339030 - Consumer material 339035 - Consulting services 449052 - Equipment and permanent material	Consultancy services (individual and firm) Non-consultancy services, training	Training, Workshops (including logistics) Services and operational costs
	Subcomponent 4.2: Training, monitoring, and evaluation (US\$4.00 million)	339035 - Consulting services 339039 - Other third-party services - firm	Consultancy services (individual and firm) Non-consultancy services, training	Training, Workshops (including logistics)



ANNEX 3: Activities to Address Climate Change

1. **School closures and disruptions due to climate shocks and natural disasters pose significant management challenges in MT, while also hampering health and learning.** Mato Grosso is part of the Legal Amazon region, but this extensive environmental capital is threatened by growing deforestation, large forest fires, and other phenomena related to climate change – such as more frequent and intense droughts. The education sector in MT is seasonally affected by disaster events that restrict access to educational facilities, such as floods, wildfires, landslides, and droughts, and these are expected to increase in frequency and intensity as a result of climate change. The project is aligned with the goals of the Paris Agreement on both Mitigation and Adaption.

2. **The project intends to address these vulnerabilities and enhance climate resilience and adaptation and mitigation through the activities detailed in Table A5.1.**

Table A3.1: Climate Mitigation and Adaptation Measures

Component Name	Activities	Estimated Activity Cost (US\$ million)	Component Cost (US\$ million)	Related PBC
Component 1: Strengthen Pedagogical Interventions and School Management Strategies for Learning Recovery			21.00	
Subcomponent 1.1	Structured materials and energized books that students can take home to continue learning in the event of school closures. These materials also promote awareness of climate risks and responsiveness to natural disasters.	0.38	16.00	PBC 1: SEDUC shall have delivered Personalized Tutoring to at least 20% of State Schools with Adequate Learning Labs (US\$11.0 million).
	Training on climate preparedness and response under the Teacher Professional Development Program.	0.58		
	Inclusion of climate-related considerations in the Early Warning System to predict students' risk of dropping out. Data would be collected on how school closures due to climate-related events affects student attendance, and be used to develop and implement personalized mitigation strategies.			PBC 2: SEDUC shall have implemented Selected Activities of the EWS in at least 50% of State Schools (US\$10.0 million).
Subcomponent 1.2	Develop emergency plans and early disaster-warning systems (in coordination with state and municipality).	0.20	5.00	-



Component Name	Activities	Estimated Activity Cost (US\$ million)	Component Cost (US\$ million)	Related PBC
Component 2: Transforming Digital Infrastructure			20.00	
Subcomponent 2.1	Target schools with higher risk of exposure to climate change induced natural disasters.	16.00	16.00	PBC 3: SEDUC shall have provided Adequate Internet Connection to at least 506 State Schools (US\$16.0 million)
	Improve teachers' and students' digital skills to participate in remote learning in case of school disruptions due to climate events.			
	Provide internet connection to schools to improve infrastructure in schools to ensure their continued use as shelters in case of climate-related emergencies (87 percent of MT schools)			
Subcomponent 2.2	Upgrade EMIS, with geospatial database, to contribute to SEDUC decision-making processes related to schools' resilience by monitoring and responding to natural disaster and climate change induced events in state schools	4.00	4.00	PBC 4: SEDUC shall have deployed and is operating all the Upgraded EMIS Modules, at SEDUC and at State Schools (US\$4 million)
Component 3: Creating Green, Resilient, Inclusive and Safer State Schools			53.00	
Subcomponent 3.1	Include information on disaster risk and climate vulnerability in School Infrastructure Maintenance Management System (MMS)	1.60	46.00	PBC 5: SEDUC shall have developed and deployed the MMS in at least 50% of State Schools (US\$8 million).
	Improve energy efficiency by reducing thermal transmittance of roofs and walls and the need for artificial ventilation. Improve schools' waste management systems. Civil works to ensure WASH facilities in all intervened schools. Prioritize schools with higher risk of exposure to climate change induced natural disasters for the above interventions.	32.40	46.00	PBC 5: SEDUC shall have developed and deployed the MMS in at least 50% of State Schools (US\$8 million).
	Purchase and installation of renewable energy for schools to increase energy efficiency.	12.00		